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The Effects of Consumer Perceptions of Ethics in Online Gray Market Sourcing Activities on Trust and Purchase Intention

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ABSTRACT

Gray market goods are genuine goods that are sourced in an unauthorized manner from a distribution channel. How do consumers judge the ethicality of gray marketer's sourcing practice and what are the implications of such judgments? The results of an experimental study suggest that consumers' ethical judgments of online retailers' sourcing behaviors are guided primarily by inherent rightness (ethical sourcing) or wrongness (gray market sourcing), and secondly by the consequences of such behaviors to consumers. In addition, ethical judgment and perceived consequences for consumers (teleological factors) influenced consumers' purchase intention and trust in online retailers.

KEYWORDS: Ethics in gray markets, Ethics in parallel imports, Hunt-Vitell theory of ethics, Online Ethics, Ethics and Trust, Ethics and Purchase Intention

INTRODUCTION

Gray markets products are genuine goods sold into one market, and then brought (or imported) into another market without the authorization of the intellectual property rights (IPR) owner (Maskus, 2000). This activity is also known as parallel importation (Duhan & Sheffet, 1988). For example, when iPhone 4G was released in the USA, some Apple fans in Hong Kong could not wait for the official launching of iPhone 4G, and some spent in excess of \$3,000 to buy a gray market iPhone 4G (Luk, 2010). Unfortunately, gray market goods are not limited to cell phones; a number of tangible and intangible products such as automobiles, heavy construction equipment, watches, cosmetics, prescription drugs, software, broadcast signals, etc. suffer from the gray market activity (Antia, Bergen, & Dutta, 2004). The gray market activity in information technology (IT) industry alone is estimated to be \$58 billion, with IT firms suffering losses in profits up to \$10 billion (AGMA, 2008). Internet, a global medium which rendered physical barriers irrelevant has fueled the growth of online gray market activities, and efforts by brand owners to contain gray market activities has remained largely fruitless (Bandyopadhyay, 2010).

While there is an increase in online gray market activity, consumers may not always suspect why some genuine goods are sold at lower prices or how online retailers source gray market goods. However, many recent popular press articles are shedding light on gray market activities and educating consumers about the pitfalls of gray market purchases (Herman, 2013; Wolf, 2009). In this context, investigating how consumers form their ethical judgments about online gray market retailers and how such ethical judgments shape their purchase intention and trust becomes an important question and we seek to address this. To guide our investigation, we used Hunt-Vitell theory of ethics (Hunt & Vitell, 2006).

This research has important implications for online retailers sourcing goods from gray markets. The hypotheses developed in the study theorize how consumers form ethical judgments about online gray market activities and how such judgments impact consumers' trust in and purchase intention from an online retailer involved in gray market activities. In addition to learning about consumer behavior in gray market settings, the study also contributes to Hunt-Vitell theory by extending the theory to include the important variable of trust. The paper is structured as following. First, we present background literature on gray markets and consumer ethics. Next we develop hypotheses using Hunt-Vitell theory. In the following sections, we discuss research method, findings, and discussion and conclusion.

LITERATURE REVIEW

Gray Markets

Firms sell their products to end-customers either directly or through a network of authorized partners. Typically, the authorized channel members are provided with substantial discounts as incentives to make profits on the sale of the goods, but are also restricted by agreements to sell the goods only to genuine end-customers. However, when authorized channel members sell the branded goods to unauthorized dealers, gray market goods emerge. These unauthorized dealers typically source branded goods at a discount from authorized sellers and sell them at a price lower than the prevailing market price and make profits in the process. For instance, Hewlett and Packard (HP) alleged Maxicom PC Inc., one of its own authorized channel members, of selling the PC equipment to unauthorized dealers, and reached a settlement to recover more than \$4 million offered as pricing discounts (HP, 2008). The difference in prices of the same product in different countries is also a strong incentive for the emergence of gray market activity. In these cases, an unauthorized distributor in country A, where the prices are higher can simply import the products from country B, where the prices are lower, and if the costs of the arbitrage are lower, can make a profit in country A by selling the products at a cheaper rate. For instance, Omega, a Swiss-based watch manufacturing firm is fighting Costco on a copyright infringement case (Morlan, 2010). Omega sells its Swiss-manufactured watches through a global distribution chain. Recognizing that Omega watches are sold at cheaper rates in some countries compared to their US prices, some unknown intermediary purchased the watches and sold them to a New York based company, which in turn imported the watches and sold them to Costco. Neither the New York based company nor Costco was authorized by Omega to sell the watches. Omega alleges that Costco sold the watches for \$ 1,299, well below the Omega's U.S. retail price of \$ 1,999 (Solomon, 2010).

If gray market activity is not efficiently countered, brand owners face threatening consequences. Gray market sales, on many occasions, dominate the authorized sales. For instance, the sales of gray market personal computers (PC) in India outnumber the authorized PC sales by two to one (Antia et al., 2006). Because a number of gray market goods originally intended for high-end customers appear on low-end stores, the brand reputation suffers. Also, because the gray marketers rarely offer the kind of warranties offered by the authorized dealers, customers face problems with service requests. Overall, gray market activity is proving to be a grave threat to the bottom lines of many multinational companies and many of these companies are not yet ready to face the threat. The risk is particularly severe from Internet-based gray market retailers, because these retailers can buy goods in foreign countries over the Internet and sell them for cheap in the United States. For instance, online gray market pharmacies such as canadadrugs.com, medsforless.com sell gray market prescription drugs to U.S. customers at 10

to 80 percent discount (Bandyopadhyay, 2010). In addition, online gray market exists for goods such as tobacco and consumer electronics (Bandyopadhyay, 2010).

What do customers lose by buying from the online gray market retailers? Consumers face two types of risks: performance and financial risk. After diverting the product from the genuine distribution channels, unauthorized retailers may not stock a product properly. For instance, a prescription drug may not be refrigerated adequately causing them to losing potency and in some cases seriously affecting the patients who may take them (Sudgen, 2009). As for financial risk, many brand owners refuse to honor warranties for gray market products (Gudigantala and Bicen, 2011). Therefore, consumers who purchase big ticket gray market items expose themselves to substantial losses when these products malfunction.

Consumer Ethics

Do ethics matter to consumers? A survey done Creyer (1997) suggests that consumers do really care about ethics and they will reward a firm's ethical behavior by a willingness to pay higher prices for that firm's product. For unethical firms, she found that although consumers may purchase from an unethical firm, they want to pay lower prices. Limbu, Wolf, and Lunsford (2011) used a sample of student respondents to show that non-deception, fulfillment, and security are significant predictors of web site satisfaction, while privacy is related to loyalty. However, Carrigan and Attalla (2001) present a more sobering view of consumer ethics. Using focus group interviews, they found that although consumer awareness is on the rise, this may not result in behavior that favors ethical firms and punishes unethical firms.

In the context of gray markets, the research on consumer ethics is sparse. Liao and Hsieh (2013) examined factors that influence consumers' willingness to purchase gray market smart phones. They found that consumers' attitude towards counterfeit products is positively related to their willingness to purchase gray market phones, whereas perceived risk has a negative relationship with willingness to buy. Their study deems counterfeit products to be gray market goods, while the traditional definition of gray market considers only genuine goods that are diverted from the authorized distribution channels. Zhuang and Tsang (2008) examined ethics involved in gray market activities in a personal selling context in which both buying agents and selling agents exhibited problematic behaviors in exchange. They found that the more the empathy an individual feels for gray market activities, the more inclination that person exhibits to participate in the gray markets. Second, a belief in being punished by their company for indulging in gray market activity had a negative effect in the use of gray market activities. This particular study was conducted in a personal selling context.

In conclusion, although gray market sourcing on part of an online retailer may represent an ethical dilemma for a consumer, very little prior research examined how consumers process such information, how they form judgments about the gray market sourcing practices, and the implications thereof. This study intends to fill such gap. In the next section, we develop hypotheses.

HYPOTHESES

To develop hypotheses for this study, we rely on Hunt-Vitell theory of ethics (Hunt & Vitell, 1986; Hunt & Vitell, 2006). Hunt and Vitell (1986) originally proposed a theory of marketing ethics which is descriptive in nature, and which attempted to describe individual decision-making process for problems that involve ethical content. The scope of this current paper is confined to

situations in which consumers are aware of the gray market sourcing of the goods. Therefore, we argue that Hunt-Vitell theory of ethics is a relevant theoretical framework to develop the hypotheses.

Hunt-Vitell theory (1986) addresses is a situation where an individual is faced with a problem perceived to be containing an ethical content. Their theory suggests that once the individual observes this kind of situation, the individual perceives several possible alternatives that might be implemented to resolve the situation. At this point, the individual will invoke two kinds of evaluations: *deontological* and *teleological*. The deontological evaluation concerns the individual evaluation of the inherent rightness or wrongness of the behaviors generated from each alternative. In doing so, an individual compares the behaviors with a set of deontological norms, representing individual's values or rules of behavior. As for norms, they may include general beliefs such as stealing, honesty, cheating, and treating people fairly to issue-specific belief such as deceptive advertising, product safety, sales "kickbacks", confidential of data, etc.

In contrast, teleological evaluation concerns consequences resulting from choosing a certain alternative, and is centered on individual evaluation of how much good versus bad will result from an action. A particular action is ethical if it brings greater positive consequences in relation to the amount of negative consequences (Hunt & Vitell, 2006).

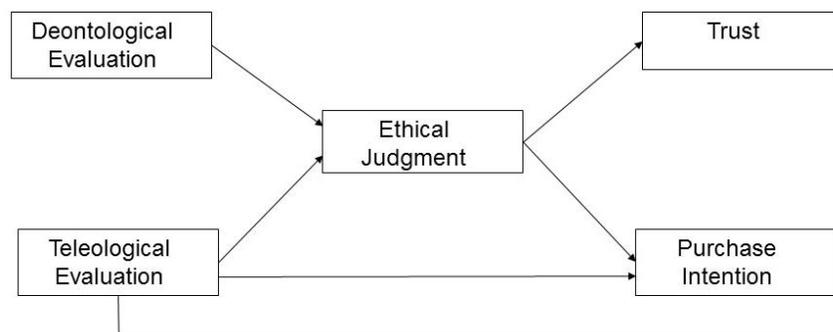
Let us illustrate a simple case to describe how individuals may arrive at deontological and teleological evaluations. Consider the situation: a consumer wants to purchase a laptop from XYZ.com. She comes to know XYZ sourced the laptops in an unauthorized fashion. But the consumer also knows that it is a genuine laptop and XYZ.com sells it for \$200 less than anyone on the Internet. When confronted with the question of whether this sourcing behavior is ethical or unethical, a strict deontologist may say it is unethical because the sourcing is unauthorized, while a strict teleologist may say it is ethical because the consumer purchases a genuine laptop for \$200 less and therefore benefits her financially.

Hunt-Vitell theory postulates that an individual's ethical judgment is influenced by the individual's deontological evaluation and the individual's teleological evaluation. Applying the theory in the context of gray market sourcing, an individual when aware of the gray market sourcing of an online retailer might use deontological norms (inherent rightness or wrongness of behavior) to judge the online retailer to be unethical. However, changing the context a little bit, if a consumer becomes aware of the gray market sourcing of a product, but if the consumer is offered the product for a price well below the market value, then the consumer might use teleological norm (perceived consequences) to judge the online retailer to be ethical because of the positive consequences accruing to the individual. However, the theory recognizes that some individuals in some cases might act as strict deontologists or teleologists, but they theorize that such situation is unlikely to occur with a majority of individuals (Hunt & Vitell, 1986).

The second major proposition of the Hunt-Vitell theory is that the intention to implement a particular alternative is a function of ethical judgment and teleological evaluation. The proposed relationship between ethical judgment and intention is consistent with the general theories in consumer behavior (Howard & Sheth 1969; Fishbein & Ajzen, 1975). The theory in this context is that ethical judgments influence behavior through intentions. Applying this formulation in the context of gray market sourced products, a consumer may judge an online retailer to be unethical and hence form an intention not to buy from the website, or vice versa.

The Hunt-Vitell theory also theorizes that ethical judgments may differ from intentions because the teleological evaluation also independently influences intentions. In the context of gray market sourced product, an individual might perceive the sourcing to be unethical and may yet be positively inclined to purchase because of the positive consequence of buying the product at a much cheaper price.

Figure 1: Theoretical Model Used in the Study



There have been a number of studies that have tested the aforementioned hypotheses, but in contexts other than gray market sourcing. Hunt and Vasquez-Parraga (1993) examined organizational consequences and ethical issues in salesforce supervision. Using an experimental design, they found that managers' intentions to either discipline or reward the behavior of their salespeople were primarily influenced by the inherent rightness or wrongness of the salespeople's behaviors (deontological considerations) and only secondarily by the consequences of salespeople's behaviors on the organization (teleological factors). Vitell, Singhapakdi, and Thomas (2001) examined ethics in the area of consumer purchase behavior in a store by investigating the extent to which consumers rely on ethical norms (deontology) versus perceived consequences of behaviors (teleology). Using three studies, they found that consumers primarily rely on ethical norms and to a lesser degree on perceived consequences in establishing ethical judgments. They also found that there is a significant positive relationship between ethical judgments and behavioral intentions. Mayo and Marks (1990) examined ethics in the context of a marketing research and found that ethical judgments to resolve dilemma in an ethical situation are jointly determined by deontological and teleological evaluations. In addition, they found that the relationship between ethical judgment and intention is weakened when implementation of intention does not include consumer's preferred consequence.

Hence, given the theoretical formulation and prior empirical support, we hypothesize:

- H1: Deontological and teleological evaluations significantly influence ethical judgments.
- H2: Ethical judgment significantly influences purchase intention.
- H3: Teleological evaluation significantly influences purchase intention.

The role of trust in online buyer behavior is well-researched. Hong and Cha (2013) researched the mediating role of trust between perceived risk and purchase intention. Using direct relationships, they found that performance, psychological, financial, and online payment risks have a significant negative influence on purchase intention. Using mediation analysis, they

found that trust in an online merchant completely mediates the effect of performance risk, but partially mediates that of the psychological risk. Therefore, trust is an essential element in online buyer behavior and the consumer perceptions of sourcing behavior of online merchants may impact consumer trust in an online retailer. In this study, we postulate that ethical judgment of an online retailer influences trust. This is because consumers find online retailers with authorized sourcing practices to be more dependable and reliable. In addition, we also theorize that any positive consequence (teleological evaluation) may also positively influence trust. Because a consumer is likely to be satisfied when offered a genuine product at a cheaper price. Therefore, we hypothesize:

H4: Ethical judgment significantly influences trust in an online retailer.

H5: Teleological evaluation significantly influences trust in an online retailer.

METHODS

We employed a methodology similar to that of Hunt and Vasquez-Parraga (1993), Vitell et al (2001), in that we used multiple scenarios to test the research hypotheses. We used two factor design (2 X 2 between-subjects design) and manipulated deontological norms (ethical and unethical sourcing by online retailer; unethical sourcing represents gray market goods) and perception of consequences (i.e. lower financial risk (consumers save money) and higher financial risk (consumers may have to pay more or face high financial risk in future)). The scenarios presented to respondents were created in the context of buying a Lenovo laptop from a U.S. based online retailer. We asked the respondent to play the role of potential buyer and evaluate the information provided in the scenario for their decision-making purposes. These scenarios were tested and refined in a pilot study using an undergraduate and graduate sample of twenty-one students.

We conducted the experiment with 114 subjects. The instructions in the questionnaire required respondents to place themselves as a potential buyer in one of the following scenarios. In addition, in scenarios involving gray market sourcing, we asked respondents to consider such information while making their decisions. Once they finished reading the scenario, they answered questions on measures related to perceived financial risk (used for measuring consequences), ethical judgment, purchase intention, and trust. The surveys were done anonymously and the participants were given course credit as motivation to participate in the study. The measures are included in Table 2. The following four scenarios were used:

	Deontologically unethical condition (seller sources from gray market)	Deontologically ethical condition (seller sources from authorized distribution channel)
Positive Consequence for Customer (low financial risk)	Scenario 1: ElectronicsForYou.com, a U.S.-based retail e-commerce company recently had an opportunity to import a large number of genuine Lenovo laptops from a wholesaler in China. <i>The Chinese wholesaler is not authorized by Lenovo to sell to U.S.-based companies.</i> Normally in the U.S., this laptop is bought at \$1100 by ElectronicsForYou.com from authorized U.S. wholesalers and sold at \$1200, but <u>ElectronicsForYou.com acquired the laptops for \$800 apiece from the Chinese wholesaler in spite of knowing the unauthorized nature of the transaction.</u> ElectronicsForYou.com now sells	Scenario 3: ElectronicsForYou.com, a U.S.-based retail e-commerce company recently had an opportunity to import a large number of genuine Lenovo laptops from a wholesaler in China for only \$800 per laptop whereas the U.S.-based authorized wholesaler sells the same for \$1100. However, the Chinese wholesaler is not authorized by Lenovo to sell to U.S.-based companies. <u>ElectronicsForYou.com decided to decline the purchase offer from the Chinese wholesaler as it is an improper transaction.</u> When Lenovo came to learn about ElectronicsForYou.com's decision, they appreciated the gesture and offered a large

	<p>these genuine Lenovo laptops at \$1000 on their website whereas the nearest rival sells the same for \$1200. Therefore, a consumer who buys laptop from ElectronicsForYou.com not only gets a genuine Lenovo laptop but also <u>gets it for \$200 cheaper</u> than the next best competitor on the Internet.</p>	<p>stock of Lenovo laptops for only \$800 per laptop. ElectronicsForYou.com now sells these genuine Lenovo laptops at \$1000 on their website whereas the nearest rival sells the same for \$1200. Therefore, a consumer who buys laptop from ElectronicsForYou.com not only gets a genuine Lenovo laptop but also <u>gets it for \$200 cheaper than</u> the next best competitor on the Internet.</p>
<p>Negative Consequence for Customer (high financial risk)</p>	<p>Scenario 2: ElectronicsForYou.com, a U.S.-based retail e-commerce company recently had an opportunity to import a large number of genuine Lenovo laptops from a wholesaler in China. <i>The Chinese wholesaler is not authorized by Lenovo to sell to U.S.-based companies.</i> Normally, this laptop is bought at \$1100 from the authorized U.S. wholesaler and sold at \$1200, but <u>ElectronicsForYou.com acquired the laptops for \$800 apiece from the Chinese wholesaler in spite of knowing the unauthorized nature of the transaction.</u> ElectronicsForYou.com now sells genuine Lenovo laptops at \$1000 on their website whereas the nearest rival sells the same for \$1200. However, Lenovo discovered this unauthorized transaction through their audits and decided to decline any warranty on this laptop to customers who purchased it on ElectronicsForYou.com. Therefore, a consumer who buys laptop from ElectronicsForYou.com not only gets a genuine Lenovo laptop but also gets it for \$200 cheaper than the next best competitor on the Internet. However, <u>once a consumer purchases the laptop, they may run into warranty issues with Lenovo in case of any problems with the laptop in future.</u></p>	<p>Scenario 4: ElectronicsForYou.com, a U.S.-based retail e-commerce company recently had an opportunity to import a large number of genuine Lenovo laptops from a wholesaler in China for only \$800 per laptop whereas the U.S.-based authorized wholesaler sells the same for \$1100. <i>However, the Chinese wholesaler is not authorized by Lenovo to sell to U.S.-based companies.</i> <u>ElectronicsForYou.com decided that it is an improper transaction and declined to purchase from the Chinese wholesaler.</u> However, a local U.S.-based competitor of ElectronicsForYou.com purchased the same laptops from the Chinese wholesaler and sells a large number of them in the market for \$1000, whereas ElectronicsForYou.com sells the same for \$1200 apiece. Therefore, a consumer who buys laptop from ElectronicsForYou.com gets a genuine Lenovo laptop but <u>pays \$200 more than the next best competitor</u> on the Internet.</p>

<p>Table 2: Measures Used in the Study</p>	
<p>Ethical Judgment (measured on 1-7 Likert Scale, 1=Very unethical, 7=very ethical) Source: Shelby, D. H., & Vasquez-Parraga, A. Z. (1993)</p> <ul style="list-style-type: none"> • I feel the sourcing behavior of ElectronicsForYou.com is..... <p>(note: “sourcing” refers to the process used by ElectronicsForYou.com to acquire the laptops to be sold to the end consumers)</p>	<p>Perceived Risk (measured on 1-7 Likert Scale, 1=strongly disagree, 7=strongly agree) Source: Vehagen, Meents, & Tan (2006). (Cronbach alpha: 0.78)</p> <ul style="list-style-type: none"> • If I were to purchase Lenovo laptop from ElectronicsForYou.com, I would be concerned that the laptop in this website may be more expensive than products in a different place • If I were to purchase Lenovo laptop from ElectronicsForYou.com, I would be concerned that I might be able to buy the same product at a different place at a lower price than in ElectronicsForYou.com • If I were to purchase Lenovo laptop from ElectronicsForYou.com, I may suffer monetary loss due to sales fraud.
<p>Trust (measured on 1-7 Likert Scale, 1=strongly disagree, 7=strongly agree) Source: Hong & Cha (2013). (Cronbach alpha: 0.95)</p> <ul style="list-style-type: none"> • I believe ElectronicsForYou.com is dependable • I believe ElectronicsForYou.com is reliable 	

- I believe ElectronicsForYou.com is honest
- I believe ElectronicsForYou.com is trustworthy

Purchase Intention (measured on 1-7 Likert Scale, 1=strongly disagree, 7=strongly agree)
Source: Vehagen, Meents, & Tan (2006). (Cronbach alpha: 0.85)

- If I needed a Lenovo laptop now, I would consider purchasing it from ElectronicsForYou.com
- If I needed a Lenovo laptop in the near future, I would purchase it from ElectronicsForYou.com
- I would recommend ElectronicsForYou.com to a friend

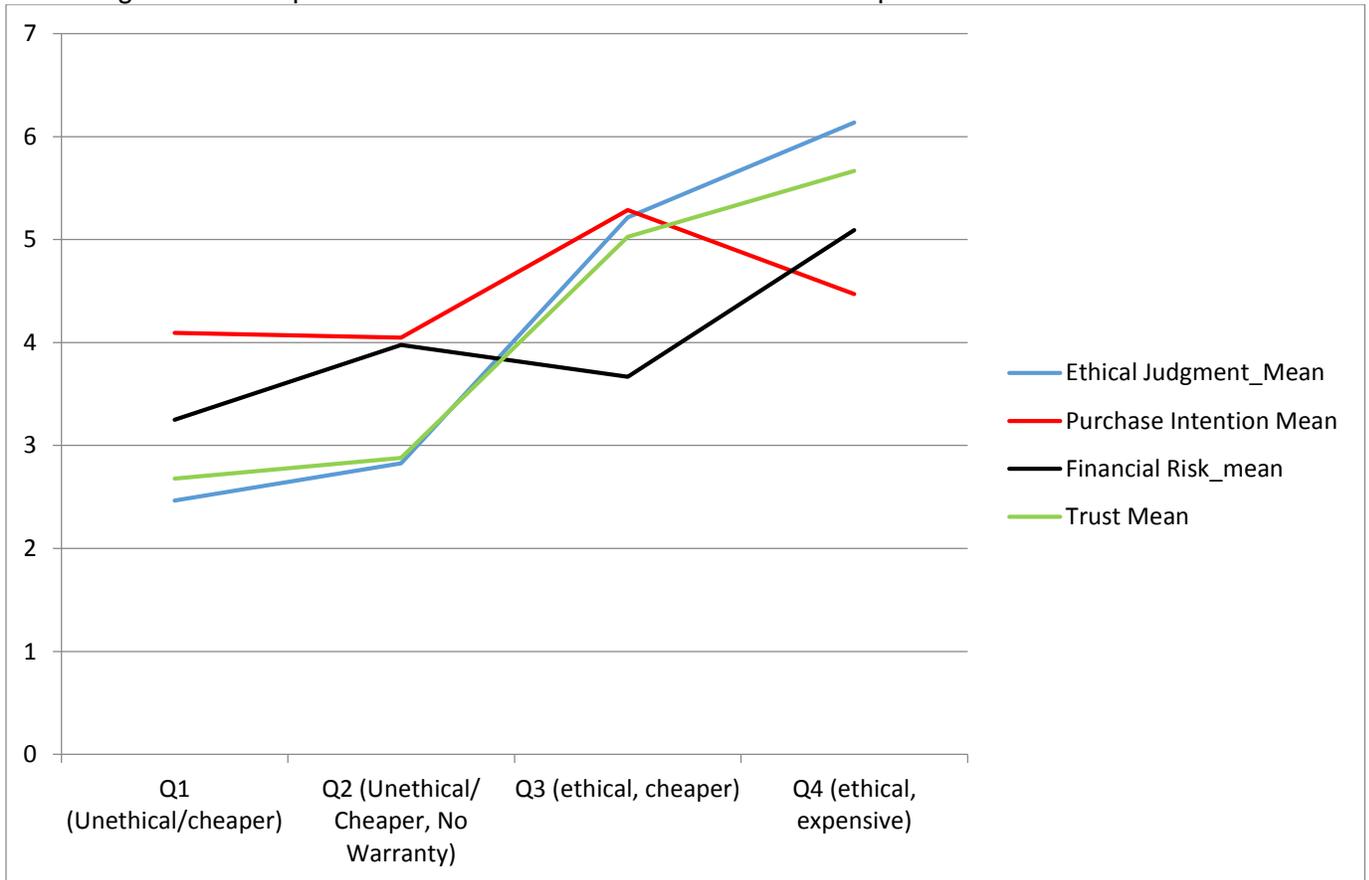
RESULTS

A total of 114 undergraduate and graduate students participated in the experiment among which 61 were male and 53 were female. The average age of participant was 21 years with standard deviation 2 years. The subjects on average had used the Internet to browse products for 11 years (standard deviation 2.5 years) and all the subjects bought something previously from the Internet. The questionnaires containing scenarios were randomly assigned to subjects. A total of 29 subjects worked on scenario#1, 28 worked on scenario#2, 28 worked on scenario#3, and 29 worked on scenario#4.

To ascertain whether or not manipulations worked, we conducted t-tests. We first checked for whether the conditions on deontologically ethical vs. unethical scenarios were perceived by respondents as the way we intended. Scenarios 1 and 2 presented situations in which the online retailers sourced products unethically (Item: "I feel the sourcing behavior of ElectronicsForYou.com is unethical (1) ethical (7)"); mean=2.65; SD=1.26) and scenarios 3 and 4 presented situations in which products were sourced ethically (mean =5.69; SD=1.53). The t-test showed that the manipulation was successful (t-stat=-11.57, p-value=0.001). Second, we checked for the teleological evaluations. In scenario 2, although the product is cheaper, the customers were told that Lenovo would decline warranty. In scenario 4, the respondents had to pay higher prices. Therefore, scenarios 2 and 4 represented negative consequences in terms of higher perceived financial risk (mean for perceived financial risk = 4.75; SD=1.8). Scenarios 1 and 3 provided situations where in the respondents were able to purchase the laptop considerably cheaper than the nearest rival (mean = 3.4; SD = 1.39). The t-test showed that the manipulation was successful (t-stat=-5.05, p-value=0.001). To measure this, we used the summated scale of the items for perceived risk. Table 3 and Figure 2 summarize the descriptive statistics and trends for the measures used in the study.

Scenario (N =sample)	Deontological Evaluation	Teleological Evaluation	Ethical Judgment Mean (SD)	Perceived Risk Mean (SD)	Purchase Intention Mean (SD)	Trust Mean (SD)
1 (29)	Unethical	Positive (low risk)	2.61 (1.2)	3.68 (1.14)	4.18 (1.55)	2.90 (0.96)
2 (28)	Unethical	Negative (high risk)	2.83 (1.31)	3.98 (1.07)	4.05 (1.40)	2.88 (0.94)
3 (28)	Ethical	Positive (low risk)	5.21 (1.73)	3.67(1.29)	5.29 (1.25)	5.03(1.59)
4 (29)	Ethical	Negative (high risk)	6.14 (1.16)	5.09 (0.64)	4.47 (1.68)	5.67 (1.19)

Figure 2. A Graph of Means of Measures Across the Four Experimental Conditions



The patterns from the above chart, for the most part, are in expected terms. The means for ethical judgments and trust are higher for ethical sourcing conditions in relation to unethical sourcing conditions. Participants’ perceived risk was higher for conditions where they were expected to pay more or when they anticipated issues with warranty. The interesting result can be gleaned from the purchase intention line. The mean for purchase intention is expectedly low and flat for unethical sourcing conditions, but spikes for ‘ethical and cheaper’ condition, but falls down steeply for ‘ethical and expensive’ condition.

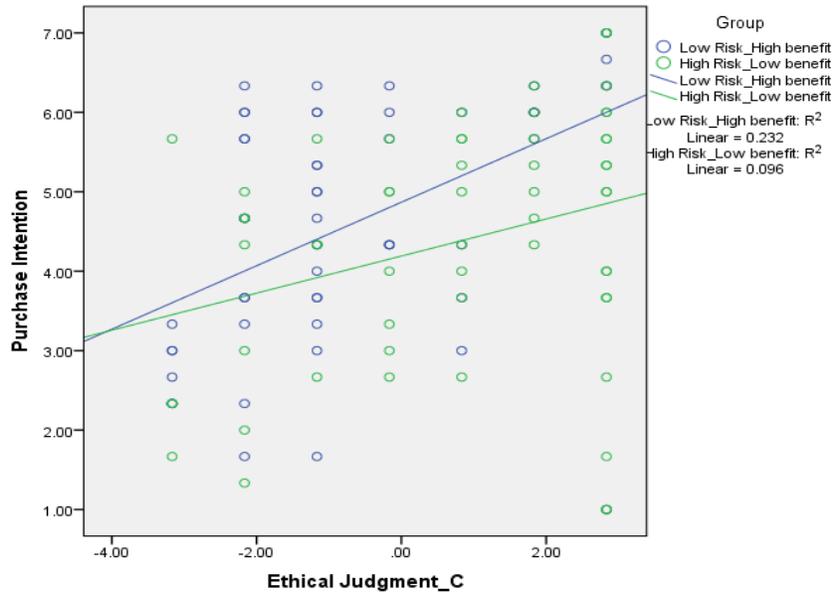
The results of the multiple regression analyses are provided in table 4 below.

Dependent Variable	Predictor Variable	Parameter (unstandardized)	Parameter (standardized)	t-value	p-value	Model R-squared; F-value; significance
Ethical Judgment	Intercept	2.322		10.406	0.0001	0.569 (F=73.37; significance=0.001)
	Deontological Evaluation (dummy variable)	3.035	0.738	11.85	0.0001	
	Teleological Evaluation (dummy variable)	0.643	0.156	2.512	0.013	
Purchase Intention	Intercept	4.593		32.447	0.0001	0.216 (F=10.08; significance=0.001)
	Ethical Judgment	0.355	0.479	5.05	0.001	
	Teleological Evaluation	-0.243	-0.277	-2.91	0.004	
	Ethical Judgment X Teleological Evaluation	-0.074	-0.176	-2.069	0.041	
Trust	Intercept	4.993		9.86	0.001	0.67 (F=75.4; significance=0.001)
	Ethical Judgment	0.849	0.998	6.98	0.001	
	Teleological Evaluation	0.328	0.326	2.48	0.015	
	Ethical Judgment X Teleological Evaluation	-0.05	-0.40	-1.86	0.065	

Multiple regression results show that both deontological evaluations (standardized beta=0.738, p-value =0.001) and teleological evaluations (standardized beta=0.156, p-value=0.013) influenced ethical judgment. However, out of the total 56.9% variation explained, deontological evaluation contributed 54.5% and teleological evaluation contributed only 2.4%. These results are consistent with Hunt-Vitell theory's predictions and support our hypothesis 1.

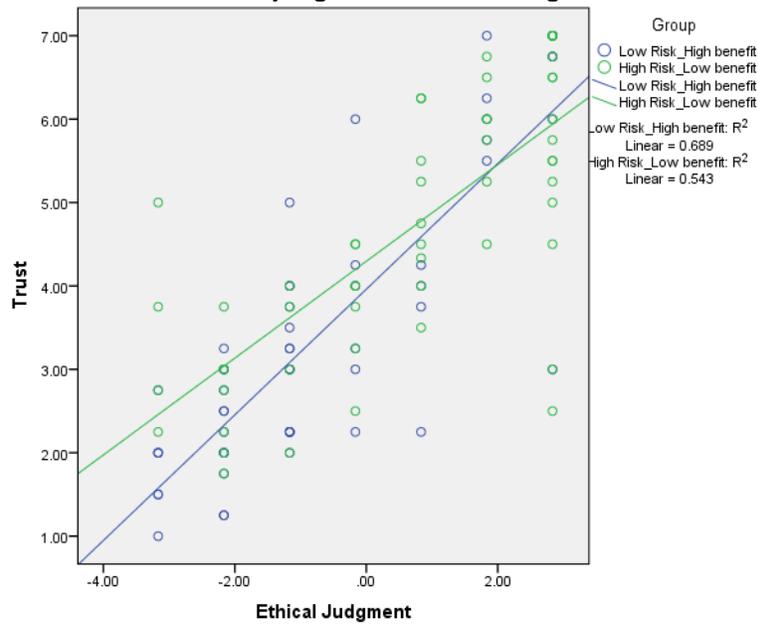
Purchase intention has been found to be significantly related to ethical judgment (standardized beta=0.479, p-value=0.001), teleological evaluation (standardized beta=-0.277, p-value=0.004), and the interaction effect is also significant (standardized beta=-0.176, p-value=0.041). As seen from the figure 3 below, higher values of ethical judgments are associated with higher values of purchase intention. However, the interaction is significant meaning consumers exhibit higher levels of purchase intention when perceived risk is low compared to when it is high. These results support our hypotheses 2 and 3.

Figure 3. Effects of ethical judgment and teleological evaluation on purchase intention



As for hypothesis 4 and 5, we found that trust is influenced not only by ethical judgment (standardized beta=0.99, p-value=0.001) but also by teleological evaluation (perceived risk) (standardized beta=0.326, p-value=0.015), but the interaction effect is insignificant ($F=75.4$, p-value of model=0.001). We found support for hypotheses 4 and 5. In conclusion, our study found support for all the five hypotheses theorized.

Figure 4. Effects of ethical judgment and teleological evaluation on trust



DISCUSSION AND CONCLUSIONS

If consumers know that an online retailer is sourcing genuine goods in an unauthorized fashion, what kinds of implications such awareness will result in? Our research finds that gray market sourcing of products is associated with lower ratings of online retailers in terms of ethical judgments, trust, and purchase intention. Although perceived positive consequences are positively associated with ethical judgments, only about 2% of variation of a total of 57% variation in ethical judgments is explained by such teleological factors; the remaining 55% of variation is attributed to consumers' evaluation of how ethical the online retailers sourcing practices are. All our results confirm the predictions of Hunt-Vitell theory of ethics (2008). The following table provides our contributions from this study.

Finding	What's new?
1. Ethical judgments about online retailers' sourcing practices are influenced by both deontological and teleological evaluations.	This finding is new to the gray market literature. This finding also confirms Hunt-Vitell theory.
2. Purchase intention of consumers is influenced by both ethical judgments about online retailers and teleological evaluations.	This finding is new to the gray market literature. This finding also confirms Hunt-Vitell theory.
3. Trust in online retailers is influenced by both ethical judgments about online retailers and teleological evaluations.	This finding is new to the gray market literature. This finding is also new to Hunt-Vitell theory.

From table 5, we show that the study makes unique contribution to the literature on ethics involved in gray market sourcing of goods. As far as we are aware of, no prior study on gray market ethics considered a realistic situation faced by consumers and examined the decision-making processes concerning ethical judgments and their implications. Therefore, the first two findings make unique contributions to the literature on gray markets.

The third finding about the relationships between trust and 'ethical judgments and teleological evaluations' is not only unique to the gray market literature, but also to the Hunt-Vitell theory of ethics. Therefore, these relationships extend the Hunt-Vitell theory of ethics by adding trust to their framework and showing that ethical judgments and teleological evaluations significantly influence trust.

The current study is not without its limitations. First, in any study of ethics there is always an element of social desirability associated with consumer responses. We have not measured or controlled for the effects of social desirability. Second, the study makes the assumption that consumers are aware of the sourcing practices of online retailers. This may not be true in a majority of circumstances, although consumer awareness of sourcing activities of firms is generally on the rise (i.e. consumers looking for "green" products). Finally, the current study only included financial risk when conceptualizing teleological evaluations. There may be other types of risks such as performance risks, psychological risks, and online payment risks. Future studies may consider some of these additional risks.

In conclusion, the findings of this study support the predictions of Hunt-Vitell theory. The implications for online retailers engaging in gray market sourcing are clear that the knowledge of these activities negatively influences consumer perceptions of trust and purchase intention. This study also contributes to Hunt-Vitell theory by theorizing how ethical judgments affect trust. This finding extends Hunt-Vitell theory.

ACKNOWLEDGEMENTS

The authors would like to thank the Dundon-Berchtold Institute of Ethics at the University of Portland for supporting this work. We would like to thank Amy Dundon, Jim Berchtold, Dan McGinty, Rev. Mark Poorman, Dr. Tom Greene, and Dr. Mike Eom for their encouragement and support.

REFERENCES

- AGMA (2008) "Three Keys to Effectively Addressing the Unauthorized Reseller Market", The Alliance for Gray Market and Counterfeit Abatement, http://www.agmaglobal.org/press_events/FINAL%20Unauthorized%20Market%20Tips%20EME A%20DRAFT%203-31-08%20doc.pdf (Current May 13, 2016)
- Antia, K. D., Bergen, M. E., Dutta, S., & Fisher, R. J. (2006). How does enforcement deter gray market incidence?. *Journal of Marketing*, 70(1), 92-106.
- Antia, K.D., M. Bergen., & S. Dutta (2004). "Competing with Gray Markets", *Sloan Management Review*, (46)1, 63-69.
- Bandyopadhyay, S. (2010). The internet and gray marketing. *International Business & Economics Research Journal (IBER)*, 9(6), 95-102.
- Carrigan, M., & Attalla, A. (2001). The myth of the ethical consumer-do ethics matter in purchase behaviour?. *Journal of consumer marketing*, 18(7), 560-578.
- Creyer, E. H. (1997). The influence of firm behavior on purchase intention: do consumers really care about business ethics?. *Journal of consumer Marketing*, 14(6), 421-432.
- Duhan, D.F. & Sheffet, M.J. (1988). Gray Markets and the Legal Status of Parallel Importation.
- Fishbein, M. & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, reading, MA: Addison-Wesley.
- Gudigantala, N. & Bicen, P. (2011) "Gray Market for Information Technology (IT) Products: Status, Implications, and Strategies to Address the IT Gray Market Threat," *Communications of the Association for Information Systems*: Vol. 29, Article 10. Available at: <http://aisel.aisnet.org/cais/vol29/iss1/10>
- Herman, M. (2013). "Amazon's Gray Market May Give OEMs a Black Eye", EBN, http://www.ebnonline.com/author.asp?section_id=1098&doc_id=270571 (current May 13, 2016).
- Hong, I. B., & Cha, H. S. (2013). The mediating role of consumer trust in an online merchant in predicting purchase intention. *International Journal of Information Management*, 33(6), 927-939.

-
- HP (2008) "HP Reaches Settlement in Gray Market Case Against Maxicom PC Inc.", Hewlett Packard, <http://www.hp.com/hpinfo/newsroom/press/2008/080311a.html> (Current May 13, 2016).
- Hunt, S. D., & Vitell, S. (1986). A general theory of marketing ethics. *Journal of macromarketing*, 6(1), 5-16.
- Hunt, S. D., & Vitell, S. J. (2006). The general theory of marketing ethics: A revision and three questions. *Journal of Macromarketing*, 26(2), 143-153. *Journal of Marketing*, 52 (July), 75-83.
- Hunt, S. D., & Vasquez-Parraga, A. Z. (1993). Organizational consequences, marketing ethics, and salesforce supervision. *Journal of Marketing Research*, 30(1), 78-90.
- Howard, J.A. & Sheth, J.N. (1969). *The Theory of Buyer Behavior*, New York: Wiley.
- Liao, C. H., & Hsieh, I. Y. (2013). Determinants of consumer's willingness to purchase gray-market smartphones. *Journal of business ethics*, 114(3), 409-424.
- Limbu, Y. B., Wolf, M., & Lunsford, D. L. (2011). Consumers' perceptions of online ethics and its effects on satisfaction and loyalty. *Journal of Research in Interactive Marketing*, 5(1), 71-89.
- Luk, L. (2010) "iPhone 4 Reaches the Gray Market", Wall Street Journal, <http://blogs.wsj.com/chinarealtime/2010/06/30/apples-iphone-4-reaches-the-gray-market/> (current July 10, 2015).
- Maskus, K.E. (2000). Parallel imports. *The world economy: Global Trade Policy*, 23, 1269-84.
- Mayo, M. A., & Marks, L. J. (1990). An empirical investigation of a general theory of marketing ethics. *Journal of the Academy of Marketing Science*, 18(2), 163-171.
- Morlan, K. (2010) "Omega, S.A. v. Costco Wholesale Corporation", More Law Lexapedia, <http://www.morelaw.com/verdicts/case.asp?d=37098&n=07-55368&s=CA> (Current May 13, 2016)
- Shelby, D. H., & Vasquez-Parraga, A. Z. (1993). Organizational consequences, marketing ethics, and salesforce supervision. *Journal of Marketing Research*, 30(1), 78-90.
- Solomon, B. (2010) "U.S. Supreme Court to Rule on Costco Copyright Infringement Case", Friends of ORIS, <http://www.friendsoforis.com/forum/index.php?showtopic=35856> (Current Aug. 20, 2010).
- Sugden, D. R. (2009). *Gray Markets: Prevention, Detection, and Litigation*. Oxford University Press.
- Verhagen, T., Meents, S., & Tan, Y. H. (2006). Perceived risk and trust associated with purchasing at electronic marketplaces. *European Journal of Information Systems*, 15(6), 542-555.
- Vitell, S. J., Singhapakdi, A., & Thomas, J. (2001). Consumer ethics: an application and empirical testing of the Hunt-Vitell theory of ethics. *Journal of Consumer marketing*, 18(2), 153-178.

Wolf, C. (2009). Losing \$63 Billion to Gray Market Is Sleuth Obsession, Bloomberg, <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=a9CXDajZFhW0> (current May 13, 2016).

Zhuang, G., & Tsang, A. S. (2008). A study on ethically problematic selling methods in China with a broaden concept of gray-marketing. *Journal of Business Ethics*, 79(1-2), 85-101.