

**An Investigation into the effects of Napster's Demise on
the Purchase Intentions of Music CDs**

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Abstract

A confirmatory investigation of consumers' reactions to Napster's demise was conducted. Preliminary regression results indicated that cognitive appraisals of Napster's shutdown elicited negative feelings in consumers. The antecedent variables which were found to contribute to these feelings were: (1) perceived social risk of purchasing a CD rather than downloading music from the internet; (2) the level of uncontrollability by consumers in the shutdown; and (3) impressions of being cheated/disappointed by a shutdown orchestrated by record companies. Subsequent LISREL analyses revealed that consumer affect was inversely related to the intention to purchase legitimate CDs and impelled consumers to search for alternate download sites. Moreover, consumer affect was found to contribute to attitude toward music companies which, in turn, impacted on intention to purchase legitimate CDs. Finally, the intention to search for alternate download sites emerged as inversely related to the intention to purchase legitimate CDs.

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Introduction

For some years, five companies have dominated the U. S. recording industry: Universal, Warner, Sony, BMG, and EMI (Graves, 2002). Each company contracted with artists, ran the production, manufacturing, and distribution of albums; and also controlled the product marketing and promotion aspects of the business. Furthermore, each company has offered music under independent labels which represent a form of branding in the industry (see Graves, 2002; Patsuris, 2002).

The advent of new technologies such as Napster resulted in the distribution of free music over the web for a while and created a disruption in the standard business practices of the music industry. In essence, Napster has changed the market structure of this industry (Varian, 2000). At its peak, Napster was used to download 2.5 billion songs each month (Abramson, 2001). It undoubtedly constituted a threat to music companies. A law suit followed which resulted in Napster being outlawed and shut down. Despite Napster's downfall, record companies have had to adapt to changes in consumer behaviour and expectations spurred by internet technologies. Although the effect of such technologies is not yet clear in terms of consumer spending (Graves, 2002), companies such as Universal and Sony were quick to offer on-line music distribution at a price (Mariano, 2002).

Given the new market structure which has emerged after Napster's shutdown, the main purpose of this paper is to investigate the impact of a variety of factors on the intentions to purchase music in compact disk form. Important antecedent factors include: (1) forms of risk (Stone & Gronhaug, 1993); (2) switching costs (Chen & Hitt, 2002) from the convenience of a

free internet download to the purchase of CDs; (3) negative affective states (Russell, 1979,1980) evoked by Napster's demise; (4) attitude (Eagly & Chaiken, 1993) toward music companies; and (5) intent to search (see Bloch, Sherrell, & Ridgway, 1986) for alternate download sites.

Descriptive results will first be reported with respect to various behaviours vis-à-vis music consumption. Next, measurement issues will be addressed. Subsequently, some formal hypotheses will be tested via regression analysis. Finally, a structural equation model will be estimated. This model will encompass a complex web of relations and will represent an attempt to confirm a number of additional hypotheses with respect to how the various factors are interrelated in a full information fashion.

Affect and Its Cognitive Antecedents

Perspectives on Emotion

Emotion is a multicomponent process (Scherer, 1984). Specifically, each basic emotion is said to involve particular neuro-physiological concomitants (Levenson, 1992), particular expressions (Ekman, 1999), a particular phenomenology (Izard, 1977), particular combinations of antecedent cognitive appraisals (Lazarus, 1991; Scherer, 1999), and particular action tendencies (Fridja, 1986). Emotion is as a topic that has recently found its way into explanations of a variety of phenomena in marketing (see Bagozzi, Gopinath, & Nyer, 1999; Oliver, 1996; Richins, 1997). Much work on emotion in this area is based on previous work in psychology where theories of emotion abound. Elsworth (1991) argues that these theories "can be characterized in terms of the number of emotions they postulate" (p. 146). Two differing perspectives are the categorical and the dimensional and both have been used in the area of consumer behaviour to assess affective reactions to stimuli (see Bagozzi et al., 1999; Richins, 1997; Westbrook & Oliver, 1991).

Categorical or discrete emotional states that have been called *basic* or *fundamental* are presumed to be innate and few in number (Ekman & Friesen, 1975). They are negative for the most part (see Ekman, 1999) and have been likened to hardwired neural programs (Izard, 1977). Consequently, they are said to involve distinct neurophysiological signatures along with distinct expressive and subjective (phenomenological) characters (Elsworth, 1991). All proposed lists of

basic emotions include fear, sorrow/sadness, happiness, and anger but tend to diverge with respect to additional entries. For instance, Izard (1977) proposed that fundamental or basic emotions include *anger, contempt, guilt, disgust, distress, fear, shame, interest-excitement, joy*, and perhaps *surprise* whereas Ekman and Friesen (1975) suggested the following: *happiness, anger, disgust, fear, sadness*, and perhaps *surprise*. Research on basic emotions has attempted to show significant differences among them, especially with respect to their expressive component (Ekman, 1999). Recent measures of emotion developed in the area of consumer behaviour, such as Richins' (1997) Consumption Emotions Set (CES), reflect a categorical perspective on emotion.

An alternate stream of research in psychology has sought to demonstrate that a small number of underlying dimensions can serve to explain differences and similarities among various affective states (see Russell, 1979, 1980). These studies have involved methodologies which were used to map affective terms (i.e., emotion words) or self-reported reactions to stimuli onto a multidimensional space. Russell (1979, 1980) argued that *pleasure-displeasure* (valence) and *arousal* were the most important dimensions underlying affect in that they accounted for a significant amount of variance among emotion terms. The reduction of affect to two primary dimensions stems from the notion that particular affective states vary with respect to similarity and are therefore interrelated (Russell, 1979). In essence, the dimensional perspective reflects a need for parsimony (Mano, 1991).

Relevant Cognitive Appraisals as Antecedents to Affect Evoked by Napster's Demise

A number of theories of emotion have focussed on the link between affective states and patterns of antecedent cognitive appraisals (e.g., Lazarus, 1991; Scherer, 1984; Smith & Ellsworth, 1985; Weiner, 1985, 1986). In general, these theories presume that cognitive assessments precede and give rise to emotions (for a recent review, see Scherer, 1999). Many appraisal dimensions have been identified in the emotions literature (see Reisenzein & Hofmann, 1990; Scherer, 1999). The results of many studies indicate that the greater the number of appraisal dimensions (until sufficiency) used to assess a particular situation or event, the more specific the resulting feeling state tends to be (see Scherer, 1999).

Consumer perceptions/assessments of risk are important determinants of consumer behaviour. Bauer (1960) argued that consumer behaviour involves risk in that actions by consumers give rise to consequences which the consumer may view with some amount of uncertainty. Bauer (1960) also suggested that attempts by consumers to gather information represent ways of reducing risk (see also Bettman, 1979). Different conceptualizations of perceived risk have been proposed in the literature (see Dowling, 1986; Gumbund, 1985). Nevertheless, many do rejoin Bauer (1960) in that they define risk in terms of the consumer's perception of the uncertainty and adverse consequences of buying a product or service (see Dowling and Staelin, 1994).

Consumer researchers have put much effort in identifying the different dimensions of perceived risk and in understanding their impact on consumer decisions. Six distinct types of risk have recently been postulated: (1) performance risk, (2) time-related risk, (3) physical risk, (4) psychological risk, (5) social risk, and (6) financial risk (see Stone & Gronhaug, 1993). Given the issues that are investigated in this study, it seems that social, psychological, and financial forms of risk along with that related to time are most relevant. Performance and physical forms of risk do indeed appear to be of a lesser importance when discussing Napster's demise, CDs, and download sites.

Few studies have attempted to directly link perceived risk and emotion in consumption settings (see Chaudhuri, 2002; Havlena & Holbrook, 1986; Holbrook, 1986). Although Dowling and Staelin (1994) argued that perceived risk has both cognitive and affective components, they went no further in conceptualizing the relations between these components. A more recent and direct attempt presented emotion as a form of knowledge or intuition which, in turn, determined risk (see Chaudhuri, 2002). Such an argument is valid only if one adopts a perspective on emotion and cognition that is commensurate to that presented in Zajonc (1984) where it was argued that appraisal theorists were wrong because affect (i.e., preference) can be elicited without antecedent cognition. In response to Zajonc's claims, Lazarus (1984; see also 1991) suggested that some form of cognition *always* precedes emotion and that therefore Zajonc was wrong. This ignited a debate in the field of psychology which has yet to be resolved. Our goal here is not to resolve or contribute to this debate. However, it is necessary for us to choose among the two opposing perspectives because a significant portion of this study rests on causal

modelling. In keeping with the widely accepted C-A-B framework (Holbrook & Batra, 1987) and the fact that the dominant/mainstream perspective on emotion is that of appraisal theorists (see Bagozzi et al., 1999), risk assessments are consequently positioned here as antecedents or predictors of affective states. Moreover, Scherer's (1984, 1988) appraisal theory addresses the notion of whether an event was foreseeable and this speaks to perceived risk as a form of antecedent appraisal. Hence, it constitutes an indication that risk assessments can play a role in eliciting affect.

Napster was a free and very convenient service that essentially allowed consumers to pick and choose songs without having to purchase an entire CD or spend time shopping for music in stores. Napster's demise was a situation which clearly affected millions of consumers of music (Abramson, 2001). Moreover, music companies made sure that alternate forms of procurement were no longer free and that remaining free download sites were discouraged from continuing to offer their services because of threats of being sued like Napster for enormous amounts of money. According to Bauer's (1960) theory of risk, this event likely resulted in negative consequences and greater uncertainty for Napster users in that the shutdown forced them to seek out alternate and perhaps unwanted and relatively inconvenient ways to procure music. Thus, Napster's demise pushed its users into a consumption situation where multiple forms of risk emerged.

The consequences to users were not only likely to involve increased risks but switching costs as well (see Chen & Hitt, 2002). Switching costs are defined as the psychological, physical, and economic costs that consumers face in switching between technologies (Jackson, 1985) and are an important determinant of return patronage (see Jones, Mothersbaugh, & Beatty, 2000). In particular, consumers of high-technology products have strong incentives to remain loyal to a particular technology and its upgrades because of anticipated switching costs (Pae & Hyun, 2002). Many appraisal theories of emotion discuss coping potential (for examples, see Lazarus, 1991; Scherer, 1984; see also Scherer, 1988). This appraisal dimension is certainly related to the anticipated or perceived costs of the changes a situation such as Napster's shutdown was likely to lead to.

Weiner (1985) suggested that when an event occurs, people tend to spontaneously look for its causes. Therefore, one process in which consumers may have engaged in while

assessing the situation which led to Napster's demise rests in causal attribution. An assessment of a situation based on causal attribution has been shown to lead to various discrete affective states (Weiner, 1986). This framework has in fact been used to explain reactions to a broad range of situations involving failure (see Russell & McAuley, 1986; Folkes, 1984).

A dimensional perspective on causal attribution was proposed in Russell (1982). The dimension of *controllability* appears particularly relevant to the situation at hand. For instance, Weiner (1985, 1986) reported that when assessments of the cause of some form of failure led to the conclusion that they were controllable by a person (e.g., failing an exam because one procrastinated), this was likely to contribute to feelings of anger whereas appraisals which resulted in the conclusion that a cause was uncontrollable (e.g., failing an exam because one was ill and unable to study) were likely to contribute to feelings of sadness. Napster's demise was clearly due to a lawsuit brought about by music companies. Hence, consumers were likely to attribute this to controllable and intentional actions on the part of these companies.

Apart from perceived risk, switching costs, and causal attribution, other appraisals were likely to have been engaged in by consumers in reaction to Napster's demise. In particular, Napster offered much value to many devoted users (Ante, Brull, Berman, & France, 2000). Its demise may have potentially resulted in a sense of loss, disappointment, or of being cheated by record companies because consumers were now forced to pay for music and its procurement had become much less convenient (e.g., having to travel to music stores) and more cumbersome (e.g., having to buy an entire CD when often a consumer was only interested in one or two songs). Both Scherer's (1984) and Frijda's (1986, 1987) appraisal theories specify a category of antecedent appraisal that is generally concerned with justice. It includes behaviours perceived as unjust, amoral, or inappropriate. A sense of being cheated or deprived of something appears to fit well into this category.

As discussed above, appraisal theories generally hold that cognitive judgments give rise to emotion (Scherer, 1999). Hence, appraisals by consumers of Napster's shutdown and its anticipated consequences most likely gave rise to a broad range of more or less specific feelings which were negatively valenced (see Russell, 1979, 1980).

The following hypotheses are proposed based on the above discussion:

- H1: Perceived risk in purchasing CDs contributes to negative affect toward record companies.
- H2: Perceived switching costs contribute to negative affect toward record companies.
- H3: The more controllable by record companies consumers perceive Napster's demise, the greater the negative affect toward record companies.
- H4: A sense of being cheated or deprived by record companies contributes to negative affect toward record companies.

Affect and Behaviour

Music companies clearly have a vested interest in getting consumers to purchase legitimate CDs and in discouraging the purchase or download of pirated material. Many researchers have suggested that affective states give rise to specific behaviours or some form of action tendency (see Fridja, 1986, 1987; Scherer, 1984). Accordingly, it is suggested here that the affect evoked by Napster's demise impelled consumers to behave in particular ways which were generally detrimental to music companies. Specifically, some may have been motivated to seek out alternate download sites so as to still avoid paying for music or purchasing legitimate CDs.

- H5: The more negative the feeling state which resulted from Napster's demise, the lesser the intention to purchase legitimate CDs.
- H6: The more negative the feeling state which resulted from Napster's demise, the greater the intention to search for alternate download sites.

Attitude Toward Music Companies

Attitudes represent global and enduring evaluations. Many perspectives on attitude assume a learning process or some form of prior exposure to an object (Fazio, Sanbonmatsu, Powell, and Kardes, 1986; see also Eagly & Chaiken, 1993). Antecedents to attitude can be affective, cognitive, and behavioural (i.e., past behaviour) (Zanna & Rempel, 1988). Thus, affective reactions can contribute to an attitude toward a target. Eagly and Chaiken (1993) refer to the resulting evaluations as emotion-laden attitudes. Accordingly, it is argued here that negative

affective states in reaction to Napster's demise led to a negative attitude toward music companies.

Attitude toward a target and subsequent behaviour toward that target are likely to be related. A compatibility between attitude and behaviour was reported in many studies (see Ajzen & Fishbein, 1977). Accordingly, Eagly and Chaiken (1993) state that: "(p)eople who hold positive attitudes should engage in behaviours that approach, support, or enhance the attitude object, and people who hold negative attitudes should engage in behaviours that avoid, oppose, or hinder the object" (p. 155). This perspective reflects the traditional approach of predicting behaviours from attitudes about targets (see Fazio, 1986). Finally, the attitude-behaviour consistency much discussed in the literature implicitly suggests that engaging in non complementary behaviours is unlikely. Hence, one would tend not to be simultaneously inclined to seek out alternate download sites and have the intention to purchase legitimate CDs.

The following hypotheses are suggested:

- H7: The more negative the affect which resulted from Napster's demise, the more negative the attitude toward music companies.
- H8: The more negative the attitude toward music companies, the lesser the behavioural intent to purchase legitimate CDs.
- H9: The intention to search for alternate download sites is negatively related to the intention to purchase legitimate CDs.

Methodology

Sample description

Convenience sampling was used. The study was carried out in a business school within a large metropolitan area in Canada. A majority of the respondents in the sample (n=177) were female (50.3%), reported being full-time students (65%), and to have completed an undergraduate university degree (52%). The mean age of respondents was 23.8 years. Most (20.5%) reported a gross income between \$10,000 and \$19,999. Most claimed they spent 16 hours or more per week on the internet (39.1%) and that they had a computer at home (98.3%) along with access to the internet from home (89.3%).

Measures

The questionnaire contained four dichotomous items which assessed whether or not, over the last 12 months, respondents had purchased CDs legally, whether they had purchased pirated CDs, whether they had burned someone else's copy of a CD, and whether they had downloaded MP3 music files from the internet. An affirmative answer to each of these items was supplemented by an item asking respondents to estimate the actual number of CDs or music files acquired in a particular fashion. Another item with categorical response options assessed whether purchases of CDs had increased, decreased, or remained unchanged since they began downloading MP3 files. The next item prompted respondents to indicate whether they had downloaded files from label-endorsed or free peer-to-peer file sharing services. A subsequent item asked if the respondent was a Napster user.

Four dimensions of perceived risk were measured with adaptations of existing scales found in Stone and Gronhaug (1993). Five items reflecting the pleasure component of J. Russell's (1980) PAD were used to assess the valence of affective reactions. The controllability component of D. Russell's (1982) Causal Dimension Scale was also included in the questionnaire along with an additional item which asked respondents to indicate who they blamed for Napster's demise. A three-item measure of switching costs was adapted from the scale found in Jones, Mothersbaugh, and Beatty (2000). Three Likert-type items were generated so as to assess the extent to which consumers perceived themselves as cheated and disappointed by Napster's shutdown: (1) "I feel cheated by major music companies because they caused the demise of Napster"; (2) "I am disappointed by the shutdown of Napster"; and (3) "I feel cheated by the shut-down of Napster." Three additional Likert-type items were devised to assess attitude toward major music companies: (1) "Major music companies are good"; (2) "I like major music companies"; and (3) "I have favourable feelings towards major music companies." Finally, respondents were asked how they would behave the next time they wanted to own a piece of music. One Likert-type item assessed whether consumers would be inclined to search for download sites: "It is likely I will search for information on where to download the song" and another assessed the intention to purchase the CD at a store: "It is likely that I will buy the CD at a music store." All Likert-type items had anchor points '1' (Strongly Disagree) and '7' (Strongly

Agree). All items described above appear in Tables 1 and 2. Internet usage and socio-demographics items appeared at the end of the questionnaire.

Results

Music Acquisition Behaviour

Among the respondents who said they had purchased a music CD over the last 12 months (70.6%), the mean number of purchased CDs was 10.1. Among those who admitted having burned someone else's copy of a CD over the last 12 months (63.8%), the reported mean number of burned CDs was 14.7. Among those who admitted to having purchased at least one copy of a burned CD in the last 12 months (10.2%), the mean number of purchased pirated CDs was 14.1. Among the respondents who said they had downloaded MP3 music files from the internet (65%), the mean number of downloaded files was 170.1 over the year.

When asked whether the number of CDs they purchased had increased or decreased since they have been downloading files from the internet, 51.3% responded that it had decreased whereas 43.7% claimed it had stayed the same and only 5% reported an increase in purchase frequency. At first glance, the availability of music on the internet clearly affects the purchase of legitimate music CDs. Moreover, when the respondents were asked to indicate whether they used label-endorsed download services or free of charge peer-to-peer files sharing services, only 1.7% claimed to use the former whereas 98.3% said they used the latter. Furthermore, 42.4% said they were Napster users while the service was in existence and the majority of respondents blamed record companies (32.2%) for Napster's demise. Some (10.2%) blamed the music industry, others (16.9%) blamed artists, and still others (18.1%) blamed copyrights. It is interesting to note that only 9% of respondents attributed Napster's shutdown to consumers.

Factor Analyses and Psychometric Qualities of Scales

Unidimensional constructs and their respective items appear in Table 1 which summarizes the final results of a series of exploratory (PC) factor analyses and provides Cronbach's coefficient alpha estimates for each unidimensional composite. Each factor solution was indicative of unidimensionality because the total variance explained in each was greater than 50%.

Cronbach's alpha estimates suggested that the reliability of each composite ranged from acceptable to high levels. Furthermore, all factor loadings were above the threshold of .4 (see Churchill, 1979). After initial factor analyses were performed, no items were deleted from each respective scale except for one item in D. Russell's controllability measure because of a relatively lower loading. The final composite therefore consisted of two items for which the Spearman correlation is reported. Additive scores for each unidimensional composite were computed for subsequent use in regression analysis.

Results of the factor analysis conducted on the four components of risk deemed to be involved in purchasing CDs along with reliability estimates appear in Table 2. All items loaded on their intended factors and all Cronbach's coefficient alpha estimates were greater than .79. An additive score was computed for each dimension.

Regression Results

Appraisal theorists have commonly used regression to investigate the impact of multiple appraisal dimensions on emotion (Scherer, 1999). To gain insight into the effects of perceived risk and other forms of cognitive appraisal on affect, a regression model was tested. The model permitted a test of hypotheses H1 through H4, inclusively. Its specification involved the additive score of the five items of J. Russell's pleasure component of the PAD as the dependent variable. Independent variables included the additive scores of the four dimensions of risk presented in Table 2, the additive score of the two retained items assessing controllability (see Table 1), the additive score of the three items assessing switching costs from free peer-to-peer downloads to purchasing legitimate CDs (see Table 1), and the additive score of the three items representing the appraisal of the extent to which consumers sensed they were cheated/disappointed by record companies following Napster's demise. Model estimation yielded significant effects ($F(7,116) = 15,478; p .001$) and resulted in an adjusted R^2 of .466. Closer inspection of the results revealed that the effects of only three independent variables were significant. Standardized coefficient estimates are reported in Table 3.

Among the four risk factors, only perceived social risk was significant at the .05 level. H1 was therefore only partly confirmed. Controllability was significant at the .01 level. H3 was

therefore confirmed. The sense of being cheated/ disappointed by music companies emerged as significant at the .001 level. H4 was therefore also confirmed. On the other hand, the effects of switching costs were not significant. H2 was therefore disconfirmed. In sum, the results indicated that the greater the levels of (1) perceived social risk in purchasing legitimate CDs, (2) consumer uncontrollability in Napster's demise, and (3) a sense of being cheated/disappointed by music companies because of Napster's demise, the greater the level of negative affect reported by consumers.

Estimation of the Structural Equation Model (SEM)

The review of the literature presented above and the regression results reported in the previous section allowed for the specification of the model which appears in Figure 1. The proposed model reflects what has been called the Cognition-Affect-Behaviour (C-A-B) framework (see Holbrook & Batra, 1987). Generally, this framework holds that cognitive judgments, such as those which pertain to risk and causal attribution, determine affective states which, in turn, impel behaviour. Such a model is also quite consistent with cognitive theories of emotion.

The model presented in Figure 1 was analyzed with the program LISREL VIII (Jöreskog & Sörbom, 1993). One important advantage of this methodology rests in its full information character. In other words, this procedure allows one to estimate the parameters of all specified relations at once. Only the variables which had a significant impact on pleasure-displeasure in the regression analysis (see Table 3) were retained as exogenous factors in the model so as to make it as parsimonious as possible and to limit potential overparametrization effects on overall model fit (see Byrne, 1998; Hu & Bentler, 1995).

Using one or two indicators per construct in SEM tends to result in identification problems (Bollen, 1989). Additive scores of each construct were therefore not used as in the regression analysis. In fact, the variables used to construct the correlation matrix which served as the input file for LISREL were the four items assessing social risk which appear in Table 2 and all the items which appear in Table 1 except for Pleasure-Displeasure. In this case, only the first three items reported in the factor analysis in Table 1 were chosen because of their relatively higher loadings. Estimation of this preliminary model revealed that some measurement error variances (TD's) and that some standardized residuals between elements of the actual and estimated

covariance matrices were quite high. This apparently contributed to poor fit. These items were subsequently deleted in a sequential fashion and a respecified model was submitted to estimation after every item deletion. The model which emerged as least problematic and most parsimonious is in fact that which appears in Figure 1.

A Lisrel model of this type involves two submodels. One is called the *measurement model* and involves the actual indicators of constructs (x's and y's). The parameter estimates of interest are the Lambda coefficients (LX's and LY's). They are akin to factor loadings in exploratory factor analysis. When squared, these values indicate item reliability (Bollen, 1989). In essence, the higher this standardized coefficient's value, the greater the reliability of the item in capturing its respective construct. In Table 4, it is evident that all Lambda coefficients are significant at the .05 level ($|t\text{-value}| \geq 1.96$) and indicative of acceptable to high levels of item reliability.

The other submodel is referred to as the *latent variable model*. It represents the specified relations among latent constructs. These relations are represented by the structural parameters Beta's and Gamma's. These parameters are to be interpreted in the same fashion as regression coefficients. Each represents a hypothesis to be tested. Specifically, estimation of this model provided a simultaneous test of Hypotheses H5 through H9, inclusively. In Table 4, each Gamma and Beta parameter estimate is significant at the .05 level ($|t\text{-value}| \geq 1.96$). This indicates that the five hypotheses were confirmed.

Generally, the chi-square is considered a problematic measure of fit because its value tends to increase with sample size and the number of parameters to be estimated (Hu & Bentler, 1995). Researchers therefore rely on other measures of fit which are less sensitive to sample size and overparametrization. In particular, CFI and NFI values greater than .9 are taken to indicate a meaningful model (Byrne, 1998). Estimation of the model presented in Figure 1 therefore appears to have resulted in acceptable levels of overall fit (see Table 4).

Discussion and Conclusion

The model presented in Figure 1 describes intrapersonal processes based on the widely held C-A-B framework (Holbrook & Batra, 1987) which generally holds that thoughts determine affect, which in turn, impels behaviour. Although much remains to be demonstrated with respect to the

role of affect in the consumption experience (Bagozzi et al., 1999), it is widely accepted that products and services evoke emotion (Oliver, 1996; Richins, 1997). The forced discontinuity of a widely appreciated service by consumers is also likely to evoke emotion.

Napster's demise triggered cognitive assessments by consumers which led to negative affective states. The salient appraisal dimensions involved perceived social risk in purchasing CDs, level of consumer uncontrollability, and a sense of being cheated/disappointed by the industry. It also appears that the resulting affective states contributed to attitude toward music companies and impelled consumers to seek out alternate download sites and avoid the purchase of legitimate CDs. Attitude emerges here as a mediator of the affect-behaviour link. Moreover, the two behavioural intentions that were modelled in this paper essentially reflected the approach-avoidance paradigm (see Fridja, 1986, 1987; Lazarus, 1991). They were thus found to be inversely related to each other. In sum, our results suggest the importance of affect in determining attitude and behaviour toward companies after they have taken some form of corrective action against seemingly delinquent behaviours on the part of consumers. Perhaps that in the longer term, these actions will serve to weed out delinquent behaviours on the part of consumers and companies who persist in offering free or very inexpensive download services which infringe on copyrights. However, in the short-term, it appears that consumers remain motivated to acquire music in ways which are detrimental to the sale of legitimate CDs.

The proposed SEM model involved a specification of consumer affect in reaction to Napster's demise based on one dimension of Russell's (1980) conceptualization of affect (i.e., pleasure-displeasure). This choice of construct was mostly motivated by a concern for parsimony and a taking into account of research which clearly suggests that the ability to experience simultaneously mixed emotional states at the categorical level is limited because their phenomenology, expressions, and physiological indicators tend to differ (Izard, 1977; see also Green, Goldman, & Salovey, 1993).

Had we adopted a categorical perspective on emotion, this would have necessitated the specification and estimation of a different model for each categorical emotion of interest. Furthermore, Bagozzi et al. (1999) argue that category-based approaches, as opposed to their dimensional counterparts, are most suitable within the context of a particular theory where categories of emotion can be operationalized as antecedents, consequents, or moderator

variables and when rather complex manipulations of antecedent appraisals are attempted as opposed to instances where one measures reactions to a single stimulus such as an ad. Again, given the number of categorical emotions that may have been evoked by Napster's demise and the SEM methodology used in this study, neither condition coincided with the goals and procedures of the current study.

On the other hand, Russell's dimensional conceptualization makes no assumption about emotional states being significantly different from each other based on such things as their phenomenology. In fact, Russell's (1979, 1980) work suggests similarity between affective states as long as they are positioned close to each other on the dimensions of *pleasure-displeasure* and *arousal*. Although many have argued that this is a shortcoming whereby fear, for instance, is categorized as a more aroused version of grief (see Elsworth, 1991; Fridja, 1986), Russell's dimensional approach provides a needed summary perspective on emotion which allows one to incorporate varying affective states into one SEM model based on the valence of these states.

Although appraisal theories are dominant in the field of emotion (see Bagozzi et al., 1999), some problems are clearly apparent with this perspective. In particular, there appears to be little consensus as to the number and type of appraisal dimensions that are required to determine a discrete emotional state (Scherer, 1988, 1999). Given that we chose to focus on perceived risk and such things as perceptions of being cheated/disappointed by Napster's shutdown, the dimensional perspective once again emerged as the correct choice for operationalizing emotion as a function of a limited yet seemingly relevant number of antecedent cognitive appraisals. In other words, the appraisal elements chosen for this study were most likely insufficient in number and too varied to accurately predict a specific categorical emotion in reaction to Napster's demise. Keeping affective reactions at the dimensional level rather than the categorical therefore seems to have avoided many problems. Nevertheless, future studies should attempt to identify a greater number of salient cognitive appraisals which contributed to the feelings of consumers with respect to the actions of music companies against a service which provided much value to the consumer and had many devotees (Ante et al., 2000).

Another shortcoming with appraisal theory paradigms is that the methodologies used to demonstrate their validity often involve asking consumers to consciously recall the antecedent

appraisal dimensions they used to assess an event and how they felt as a result of this event (e.g., Smith & Ellsworth, 1985). Nevertheless, many researchers in the field of emotion admit that cognitive appraisals are likely to occur outside awareness (see Scherer, 1999). Similarly, asking consumers to recall how they felt when an important event occurred may not result in an answer which reflects their true feelings at the time. Rather, it may generate an answer based on social norms or on how someone was supposed to feel in a given situation.

A major shortcoming in attitude formation research has been the difficulty in identifying criteria which can be used to ascertain whether attitudes are formed by affect or cognition (see Eagley & Chaiken, 1993). This paper does not pretend to elucidate this issue or to contribute to the debate. However, the adoption of a confirmatory approach which rests on the C-A-B framework and the widely accepted cognitive theories of emotion permitted a model specification which suggests that attitude toward music companies was at least partly determined by affective reactions to Napster's demise. These findings rejoin the attitude formation model proposed in Zanna and Rempel (1988).

When attempting to predict behaviour from an attitude toward a target, many non-attitudinal variables should moderate the attitude-behaviour link (Eagley & Ajzen, 1993). In particular, future studies should focus on *perceived music availability on the internet* and *issue involvement* (Petty and Cacioppo, 1981) in the Napster affair as potential moderators. Switching costs were positioned here as antecedent appraisals. However, they may perhaps be modelled in a more meaningful fashion as moderators of the attitude-behaviour link (Jones et al., 2000).

Finally, students with low income levels were used as a sample for this study. Therefore, the generalization of these results seems somewhat problematic especially with respect to the effects of perceived social risk. Specifically, students may frown upon each other for having purchased something that they can get for free. However, this may not hold for a more mature segment of the population.

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Figure 1

LISREL Model of the Antecedents and Consequences of Feelings Evoked by Napster's Demise

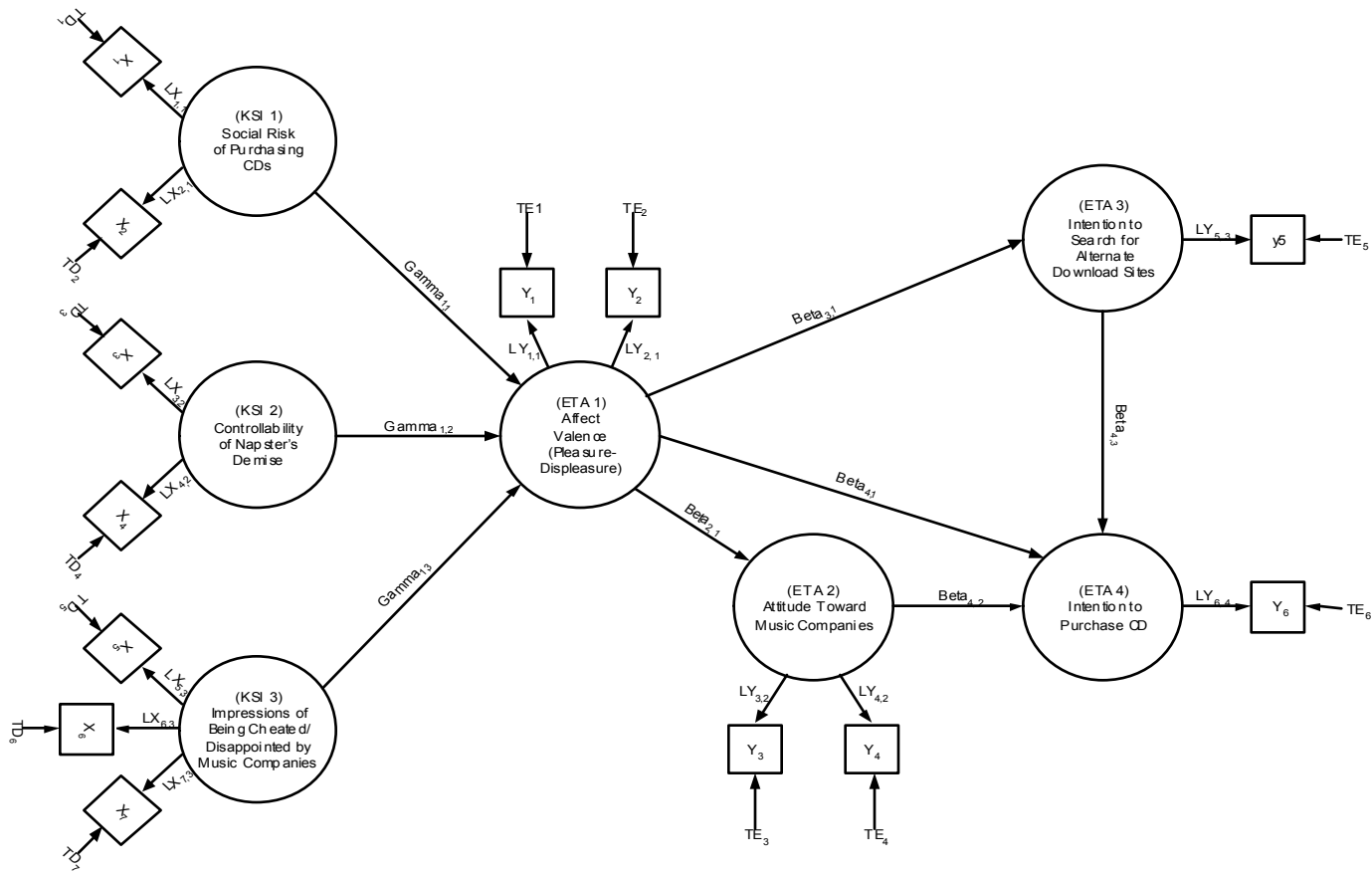


Table 1

Results of Separate Exploratory Factor Analyses (PC) and Reliability Estimates for Each Unidimensional Construct

Variable	Factor 1
<i>Switching Costs From Free File Sharing to the Purchase of CDs ($\alpha = .805$)</i>	
In general, it would be a hassle to change from a free peer-to-peer file sharing service to the purchase of CDs.	.907
Changing from a free peer-to-peer file sharing service to the purchase of CDs would take a lot of time and effort.	.799
To me, the costs in time, money, and effort to switch from a free peer-to-peer file sharing service to the purchase of CDs are high.	.843
<i>Total Variance Explained: 72.4%</i>	
<i>Attitude Toward Major Music Companies ($\alpha = .928$)</i>	
Major music companies are good.	.944
I like major music companies.	.930
I have favourable feelings towards major music companies.	.931
<i>Total Variance Explained: 87.4%</i>	
<i>Pleasure-Displeasure after Knowing Napster was Closed Down ($\alpha = .945$)</i>	
Happy - Unhappy	.928
Pleased - Annoyed	.937
Satisfied - Unsatisfied	.958
Contented - Melancholic	.922
Hopeful - Despairing	.776
<i>Total Variance Explained: 82.2%</i>	
<i>Controllability by Consumers of Napster's Demise ($r = .535$)</i>	
Controllable by consumers like me - Uncontrollable by consumers like me.	.876
Intended by consumers like me - Unintended by consumers like me.	.876
<i>Total Variance Explained: 76.7%</i>	

Table 1 Cont'd

Variable	Factor 1
<i>Sense of being cheated and disappointed by Napster's demise ($\alpha = .841$)</i>	
I am disappointed by the shut-down of Napster.	.872
I feel cheated by the shut-down of Napster.	.892
I feel cheated by major music companies because they caused the demise of Napster.	.856
<i>Total Variance Explained: 76.3%</i>	

Table 2

Exploratory Factor Analysis (PC) and Reliability Results for Four Components of Perceived Risk in Purchasing Legitimate CDs

Variable	Factor 1	Factor 2	Factor 3	Factor 4
Social Risk ($\alpha = .807$)				
Knowing that music is available on the Internet, I will look like a jerk if I buy a CD.	-.242	.498	.198	-.308
I fear what my friends are going to think of me if I buy a CD instead of downloading the songs from the Internet.	.017	.904	.021	.003
I worry that the purchase of a CD would be disapproved by people around me.	.107	.930	-.08	.089
Because music is readily available on the Internet, buying a CD could lead me to be considered as unwise by my friends.	.133	.652	.055	-.125
Time Risk ($\alpha = .879$)				
When I am shopping for a music CD, I am concerned about the time I am spending frequenting different shops.	.596	-.144	.101	-.353
The demands on my schedule are such that shopping for a CD could be a bad way to use my time.	.799	.196	.108	.061
When I plan to purchase a CD, I am concerned about the time I will have to waste to go to music shops.	.893	-.011	.046	-.057
The buying process of a CD could lead to an inefficient use of my time.	.816	.092	-0.138	-.069

Table 2 Cont'd

Variable	Factor 1	Factor 2	Factor 3	Factor 4
Financial Risk ($\alpha = .843$)				
I consider buying a CD as a bad way to use my money.	-.036	-.035	.800	-.160
When I am purchasing a CD, I am concerned that I will not get my money's worth from the product.	.011	-.002	.802	.002
There is a more appropriate way to spend my money than to buy a CD.	.203	.018	.809	.135
I consider the purchase of a CD as an unjustified spending.	-.056	.000	.864	.033
Psychological Risk ($\alpha = .791$)				
Because there are better ways to obtain music, purchasing a CD causes me to experience unnecessary tension.	.089	.017	.073	-.760
All things considered, purchasing a CD enters in conflict with the opinion I have of myself.	-.029	.349	.037	-.665
Purchasing a CD makes me feel like I made a mistake.	.144	-.045	-.027	-.787

Factor Correlation Matrix:

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	1.000			
Factor 2	.177	1.000		
Factor 3	.354	.303	1.000	
Factor 4	-.344	-.379	-.413	1.000

Table 3

Regression Results of Cognitive Appraisal Factors on Affect (Pleasure-Displeasure)

Independent Variables	Std. Betas	T-Value	Sig.
Social Risk	.201	2.38	.019
Time-Related Risk	.002	0.016	.987
Financial Risk	.011	0.138	.890
Psychological Risk	.046	0.463	.644
Switching Costs	.095	1.236	.219
Uncontrollability	.244	3.015	.003
Sense of being cheated/disappointed	.530	6.562	.000

Table 4

LISREL Model Estimates and Fit

Parameter ^a	Estimate	T-Value	Std. Error
<i>Measurement Model:</i>			
LX _{1,1} ^d	0.97 ^b	...	...
LX _{2,1}	0.82	7.83	0.11
LX _{3,2}	0.66 ^b	...	...
LX _{4,2}	0.81	4.60	0.27
LX _{5,2}	0.81 ^b	...	...
LX _{6,3}	0.82	11.19	0.09
LX _{7,3}	0.78	10.64	0.09
LY _{1,1}	0.99 ^b	...	...
LY _{2,1}	0.93	24.1	.04
LY _{3,2}	0.98 ^b	...	...
LY _{4,2}	0.70	3.68	.16
LY _{5,3}	1.00 ^c	...	...
LY _{6,4}	1.00 ^c	...	...
<i>Latent Variable Model:</i>			
Gamma _{1,1}	0.33	4.63	.07
Gamma _{1,2}	0.25	3.16	.12
Gamma _{1,3}	0.63	7.84	.10
Beta _{2,1}	-0.15	-2.53	.07
Beta _{3,1}	0.45	6.46	.07
Beta _{4,1}	-0.29	-4.77	.06
Beta _{4,2}	0.14	2.14	.06
Beta _{4,3}	-0.53	-8.9	.06

Table 4 Cont'd

Goodness of Fit Statistics:

χ^2 (df; p-value)	92.26 (56; 0.0016)
NFI	0.93
IFI	0.97
CFI	0.97
RMR	0.069
RMSEA	0.060

Notes:

^aParameter estimates are standardized.

^bThe unstandardized coefficient corresponding to this parameter was set to equal 1.00 so as to fix the scale of the latent construct for estimation. T-values and standard error estimates are therefore not provided.

^cThe error variance (TE) of this indicator was constrained to equal 0. In essence, this constrained its Lambda parameter to 1.

^dThe model indicators represent the following items:

- X₁: I fear what my friends are going to think of me if I buy a CD instead of downloading the songs from the Internet.
- X₂: I worry that the purchase of a CD would be disapproved by people around me.
- X₃: Controllable by consumers like me - Uncontrollable by consumers like me.
- X₄: Intended by consumers like me - Unintended by consumers like me.
- X₅: I am disappointed by the shut-down of Napster.
- X₆: I feel cheated by the shut-down of Napster.
- X₇: I feel cheated by major music companies because they caused the demise of Napster.

- Y₁: Pleased – Annoyed;
- Y₂: Satisfied - Unsatisfied;
- Y₃: Major music companies are good.
- Y₄: I like major music companies.
- Y₅: It is likely I will search for information on where to download the song.
- Y₆: It is likely I will buy the CD at a music store.