Website Design Features: Exploring How Social Cues Present in the Online Environment May Impact Risk Taking

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The nature of the online environment makes it difficult for individuals to verify their safety and to identify latent risks in online activities. This limits website users' ability to take appropriate security precautions. Websites use various features and functions supported by computer-based media technologies to communicate and interact with users to achieve business success. Most website features research has previously focused solely on e-commerce websites, leaving a knowledge gap in terms of website feature design and its impact in a broader context. An investigation applying a descriptive auditing method was undertaken on 50 Australian-based websites from 15 categories to identify social cues presented to users. A website feature strategic emphasis framework was applied. Results generated a list of 48 unique features with social cues and highlighted their usage, which may influence decision-making across website categories. Without comprehensive user protection for these design features, website visitors may not be aware of potential consequences. This research enriches understanding of potential features with social cues that may influence decision-making and provides a foundation for online environment feature design regulation. Through identifying potential social and environmental cues in website features, this study will guide future studies in assessing websites' impact on online risk-taking behavior and further contribute to online risk-taking prevention.

Keywords: human-computer interaction, cues, electronic commerce

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Increasing Internet use has the potential to induce harms despite its many benefits.

Specific risks are presented by online environments that need to be identified and

prevented. In the offline environment, social cues have commonly been defined as

actions that have a specific meaning in a social context, for example, the crowdedness

of a store in shopping contexts (Baur, Damian, Gebhard, Porayska-Pomsta, & André,

2013; Liao, Huang, Huang, & Deeseentham, 2012). In online contexts, social cues refer

to information with heuristic value that can influence users' impression formation and

action (Cheung, Xiao, & Liu, 2014; Hong, Tandoc, Kim, Kim, & Wise, 2012). This

information thereby often serves as a social endorsement with the potential to generate

bandwagon effects (Fu & Sim, 2011). Typical examples of online social cues include

the number of likes on a post or product, pop-up notifications when browsing shopping

sites about how many people just purchased a particular product, or flashing headlines

on gaming website about the latest winner's jackpot. Given the constant growth of

online activity, the current research was interested in how social cues present in the

online environment impact risk-taking. In 2014-15, 7.7 million Australian households

used the Internet, with users spending an average of 10 hours online per week

(Australian Bureau of Statistics, 2016)**.** Internet usage is now ubiquitous and is only

expected to increase due to the benefits it provides, such as allowing access, sharing,

and distribution of information, and maintenance of social and work connections (Byrne

et al., 2016). The four most popular online activities among Internet users were:

banking (72%), social networking (72%), purchasing goods or services (61%), and

entertainment (e.g., gaming or watching movies) (60%) (Australian Bureau of Statistics,

2016).

The nature of the online environment (e.g., lack of face-to-face interaction) makes it difficult for individuals to identify risks, verify their safety, and to take appropriate security precautions. Individuals are often misled by online cues, which may result in people falling victim to cybercrimes (McKenna & Bargh, 2000). People's perceptions and associated risk evaluation skills are thought to be poorly adapted to online situations, as humans tend to rely on environmental and social (face-to-face) cues for risk detection (McKenna & Bargh, 2000). Examples of the types of risk that can arise from social cues and social interaction include: posting irrational content that can lead to cyberbullying or cyber-abuse; making impulsive or excessive purchases that may lead to unaffordable expenses; online shopping scams where the goods received are not as indicated or are of inferior quality; sharing personal information with a website in exchange for benefits, which could be used for third-party marketing purposes without the individual's consent; and being hacked after using an unsecured site, exposing the individual to identity theft and fraud. Despite these considerable risks, studies focusing on online risk are still relatively limited (Herrero, Urueña, Torres, & Hidalgo, 2017).

The growing dependency on the Internet in everyday life has contributed to individuals feeling less concerned about the threats and risks involved in online environments, with many users holding unhelpful beliefs about being immune to online exploitation (Debatin, Lovejoy, Horn, & Hughes, 2009). Online environments may contain different kinds of potential sources of risk for an ordinary Internet user. Keipi and colleagues (2017) revealed that harm-advocating websites are easily accessible and could be fertile ground for social interaction that might involve risk-taking behavior. Individuals are likely to experience cognitive overload when using the Internet due to

the vast amount of information it offers (Guadagno, Okdie, & Muscanell, (2013). Internet users use heuristic cues when evaluating information and making decisions online (Guadagno et al., 2013), which subjects them to greater risk due to the potential for deceit. Some of the social and psychological consequences associated with risky online behavior include loss of relationships, damaged reputation, general feelings of distress, and reduced self-esteem (Wakefield, 2013). In addition, negative financial consequences resulting from risky online activity can be devastating. These may include loss of money through online fraud, loss of employment, or making impulsive or unnecessary online purchases (Burns & Roberts, 2013; Parboteeah, Valacich, & Wells, 2008; Wang et al., 2011).

Patterns of individuals' use of the Internet have shifted, from passively accessing information to actively sharing content and interacting with others. This shift has changed the extent to which Internet use is private and anonymous, as individuals are increasingly supplying metadata and personal information online. Social cues about individuals and other users can have a significant impact on an individual's attitudes and online behaviors (Antheunis & Schouten, 2011; Spottswood & Hancock, 2017). In addition, the increasing sophistication of online security threats has made it more difficult for users to identify the risks involved when using and accessing the Internet (Byrne et al., 2016). Byrne and colleagues (2016) found that users' online behavior was primarily governed by perceived benefits to be gained, but also that users showed limited ability in assessing the level of risk associated with their behaviors in online settings. Therefore, understanding the complexity of website features' influence in the online environment from a website user's perspective is crucial to human-computer interaction research.

The roles and impacts of website design features

Website operators can manipulate signals (e.g. social cues) in online environments in an attempt to modulate consumer behavior (Mavlanova, Benbunan-Fich, & Lang, 2016). Signaling theory can be used to explain how extrinsic cues or signals are utilized by one party for the purpose of conveying hidden or low-quality information to another party to facilitate a purchase or exchange (Wells, Valacich, & Hess, 2011). Various website design features that influence site visitors' behavior and perceptions are found across different categories of websites. Song and Zinkhan (Song & Zinkhan, 2008) discovered a positive relationship between interactivity features and website effectiveness as demonstrated by outcome variables such as repurchase behavior. Websites engaging consumers were more likely to create a stronger connection and increase customer support (Blazevic, Wiertz, Cotte, de Ruyter, & Keeling, 2014). Smart technologies are 'system[s] that can be connected to the internet and used interactively.' Following their implementation, a 'smart partnership' was created online between customer and retailer (Foroudi, Gupta, Sivarajah, & Broderick, 2018). Findings from Bilgihan and Bujisic (2015) confirmed that web design features – both hedonic and utilitarian features – were important for online relationship marketing. Their hypothesis was supported, as affective commitment is influenced more by hedonic features, whereas calculative commitment is influenced more by utilitarian features (Bilgihan & Bujisic, 2015). Both of these commitment dimensions affect consumers' trust in online vendors, and are therefore essential to e-commerce loyalty (Bilgihan & Bujisic, 2015). Social networking platforms have been found encouraging their users to disclose and share information about themselves in exchange for the perceived benefits of social networking (Ellison, Steinfield, & Lampe, 2007).

The impact of social cues presented in website features has been highlighted by

multiple studies. The drive theory of social facilitation suggests that the mere presence of other people may motivate behavior by raising arousal levels, thereby facilitating dominant responses (Zajonc, 1965). Drive theory also proposes that the experience of social presence online can be reinforced through the construction of online environments that resemble land-based environments (i.e., physical face-to-face interactions). This resemblance can be particularly important for increasing people's trust in websites, thereby mitigating any concerns that they might have over privacy (Pavlou, Liang, & Xue, 2006). Hence, e-commerce websites could apply multiple strategies as a means of enhancing their social presence to encourage users to disclose personal information (Aljukhadar, Senecal, & Ouellette, 2010). Similarly, as many online gaming websites use online game communities to retain gamers, a study looking at these communities from social presence and social capital perspectives found that network convergence and interdependence characteristics of online game social networks can contribute to gamers' continuance intentions (Tseng, Huang, & Teng, 2015).

The present study, applying Curty and Zhang's (2013) conceptual framework, introduced three e-commerce strategic emphases to analyze the use of website features across a broad range of website categories and to interpret their potential influence on users' behavior. The e-commerce strategic emphasis model was developed through examination of website features used by popular   e-commerce websites. Websites with a social emphasis refer to those involving consumer-to-consumer (C2C) exchanges with user-generated content creation and a crowdsourcing focus on communication and collaboration among customers and consumers. Relevant social emphasis features are designed to support a social strategy that seeks to attract other users as well as to produce user-generated content for further use and promote collective action (Curty &

Zhang, 2013). For instance, customers can write reviews and rate products and sellers which can influence other customers' decision processes. Relational emphasis occurs in business-to-business (B2B) or business-to-consumer (B2C) interactions. It is commonly used with an emphasis on long-term customer relationship development and maintenance. Application of relational emphasis can often be found in online shopping sites, where consumers' shopping habits and preferences are collected and used for establishing customer loyalty. In contrast, transactional emphasis typically occurs in B2B or B2C exchanges to motivate immediate decision-making and action (Curty & Zhang, 2013). Instead of aiming for development of long-term customer relationships, the transactional emphasis is utilized mainly for instant sales benefit.

Previous research examining why individuals engage in risky behaviors has been restricted to offline contexts, with few studies examining the relationship between online risk-taking and aspects of the online environment that encourage these behaviors, such as the role of social cues. There is a dearth of research seeking to understand what features of the online environment may impact risk-taking behavior. This paper explores website features that may potentially impact behaviors associated with risk in online settings. The investigation aims to provide a comprehensive overview of the use of website features with social cues among various website categories. In addition, the paper makes comparisons across website categories to examine the common and distinct features used in order to determine the environmental social cues that are typically present online and which may impact risk-taking. Given the exploratory nature of this research, the audit focused on summarising the diverse range of website characteristics relating to social cues rather than the impact of these cues. It will inform future studies by identifying potential social and environmental cues worthy of further examination for assessing their impact on online risk-taking behavior, thereby

contributing to online risk-taking prevention.

Method

Sampling procedure

An exploratory audit was conducted of Australian-based websites to determine website features that may have an impact on risk-taking behavior. The selection of websites audited was as follows:

The most-visited websites in Australia from Alexa.com ("Top Sites in Australia - Alexa," n.d.) as ranked on December 2nd, 2016, were collected. Alexa ranks websites based on a combined measure of page views and unique site users. The 'top sites' lists are ordered by their one-month traffic as recorded by Alexa. Only the site's highest-level domain is recorded, aggregating all subdomains.

The list of websites was categorized according to the classification systems of Alexa.com and SimilarWeb.com. The list was separated into 15 categories: Search Engine and Reference, Arts and Entertainment, Social Network, Online Merchandise, Peer-to-peer, Hotel Booking, News and Media, Finance, Internet and Telecom, Computer and Electronics, Career and Education, Gaming, Government, Adult, and Other (redirect or error page). Given the intrinsic relationship between gambling and risk-taking, Online Wagering and Gambling website categories were also included, with relevant examples chosen from the top search results from google.com.au (on December 7, 2016) based on the search terms, 'online sports betting' and 'online casino'.

Website inclusion criteria were as follows: 1) ability for users to contribute to or interact with the website in a meaningful way; and 2) presence of at least one feature having a social cue, defined as involving information or indication about other site users

and/or their actions. Websites that only provide information but lacked the ability for user contribution or interaction, or those that had no significant features that provide social cues, were removed. No websites remained in the Search Engine and Reference, Internet and Telecom, Finance, Computer and Electronics, and Other categories after the above exclusion. Websites in Adult were excluded as they fell outside of the scope of this study. After applying the inclusion criteria, there were 10 categories remaining. The top five sites that satisfied the inclusion criteria in the remaining categories were included in the analysis. There were 50 sites chosen for the investigation (Appendix A).

Audit Process

This study used a descriptive auditing method to examine website features individually and collectively. Similar exploratory methods have been used previously in alcohol and gambling research (Gainsbury, Delfabbro, King, & Hing, 2016; Gordon, 2011). All selected websites were browsed to identify all features with social cues that may influence online behavior, including risk-taking. In the present study, features included functions, tools, pop-up messages, plug-ins, services, and applications. Counts of each feature were made per website, then summed by website category for comparison. Screenshots were taken for each selected website encompassing features with social cues using an extension from Google Chrome Internet browser called "FireShot". Our dataset includes a total of 200 screenshots.

Similar features with different names on different websites were combined to be considered as a unique feature. In total, 48 unique features were identified from the sample websites. These features were then grouped into three strategic emphases according to Curty and Zhang's (2013) conceptual framework of e-commerce strategic emphasis. Under the three strategic emphasis types, a closer analysis identified nine

functional subtypes of features, including: Register, Website Quality, Help and Support, Connection, User Testimonial and Action, User Interaction, Purchasing, Gambling, and Other (See Appendix B). The usage of features in different website categories was compared using the five sample websites' total feature count. Features present in only one specific site were recorded. Appendix B lists all 48 website features with social cues under the three strategic emphasis types.

Results

Social strategic emphasis features

Based on the audit, more features with social cues were found with social strategic emphasis than with relational strategic or transactional strategic emphasis. Degree of social strategic emphasis feature usage varied across different websites, with larger variation compared to the other two types of strategic emphasis (Figure 1). Gaming had the highest total count of social strategic emphasis features (N=37), whereas Online Gambling had the lowest count of social strategic emphasis features (N=2). Social strategic emphasis features could be separated based on two aspects: User Testimonial and Action, and User Interaction.
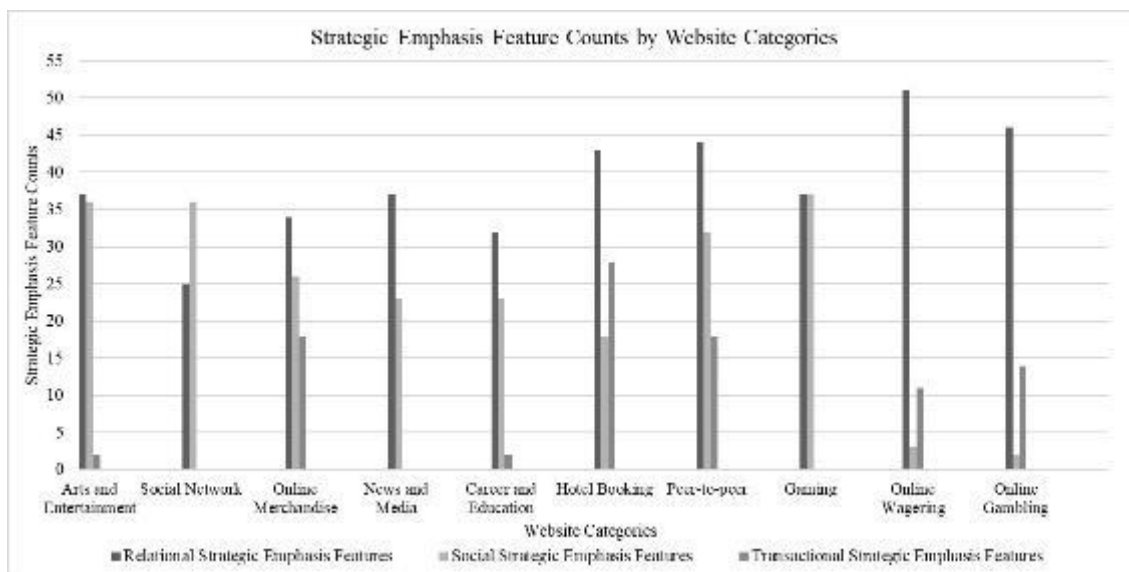
Figure 1. Strategic emphasis feature counts by website categories

Whilst some social strategic emphasis features allow users to share information with other users explicitly by writing product reviews or rating sellers, others display information about the behavior or status of site visitors and provide the sense of other consumers in a more implicit way. Social strategic emphasis features observed relating to the User Testimonial and Activity sub-type included: written reviews (identified or anonymous), ratings of review helpfulness, product sell counts, product recommendations based on other customers' purchasing activity, information about the last time a product was viewed or purchased, and active website user counts.

Written reviews frequently appeared as an online social and environmental cue towards website visitors, with 14 sample sites providing the ability to write reviews (identified or anonymous). The option to rate the helpfulness of reviews only appeared on websites with the review-writing function. Of these websites (*N*=10), 77% allowed site visitors to rate reviews based the options 'helpful' or 'not helpful' (Figure 2). Thumbs-up and thumbs-down, or up-arrow and down-arrow icons were often used for website users to indicate their attitude towards a review. Vote counts on both options

may serve as a cue for website credibility.

Figure 2. Screen caption of amazon.com's customer reviews and rating

Five websites from Online Merchandise, Hotel Booking, and Peer-to-peer categories used product sell counts (e.g., bookings made) to showcase the sales record for individual products (Figure 3). Recommendations based on other customers' purchasing activity typically incorporated lists of products bought together with the product currently in view (Figure 4). This feature was observed in two Online Merchandise websites, amazon.com and target.com.au. Websites analyze previous customer activity and display sets of additional products that other customers bought in similar combinations to market other products to the customer based on their relevance to their current purchase.

Figure 3. Screen caption of ebay.com's sold counts

Figure 4. Screen caption of amazon.com's 'consumers who bought this item also bought' section

Sites from Peer-to-peer, Gaming, Online Wagering, and News and Media categories displayed active website user counts to demonstrate the real-time status of specific product pages. This may provide site visitors with a vivid impression of the popularity of the site. Four out of five Hotel Booking websites used this function to remind site visitors of the limited rooms or deals available, and to stimulate them to make immediate booking decisions. Information about the last time a product was viewed or purchased occurred on three out of five Hotel Booking sites. This feature showed whether posted content or a product is still trendy or up-to-date. Cues of other users' recent activity might improve site visitors' motivation to be more engaged with these websites.

Another aspect of social strategic emphasis came from User Interaction, which related to Internet-based individual and group communications. User Interaction features involve platforms or channels available for users to interact directly with other

users by participating in discussion boards, posting content, liking or disliking posts, chatting in groups or privately, or sharing posts to other social media platforms, either anonymously or with a real name. Interaction features are particularly useful for websites with high expected uncertainty about sharing and gathering of information. When users are able to communicate with others, the shared consciousness and sense of moral responsibility enhance users' level of trust in the website.

Online interaction usually starts with viewing other users' profiles. The level of access to another user's profile varies across websites. On Social Network sites, users can usually customize the privacy settings, deciding who can access their profile, how much personal information is displayed, and so on. User profiles on Social Network sites are relatively accessible in contrast to other websites categories, such as Hotel Booking, Online Wagering, and Online Gambling sites, which have very strict protection over user profiles. Aside from usernames, other personal information of website users is generally invisible on websites in these categories. Interestingly, when Online Wagering and Online Gambling sites require a user's real name and personal information during the registration process, they also tend to require a username that can be used for display on the website instead of a real name.

'Posting content' is a common feature across many websites categories. Content posted could be information about a product or service, or text, images, and/or videos that express personal opinions, feelings, and attitudes. Sixty-two percent of all websites surveyed (N=35), including all those in Arts and Entertainment, News and Media, Social Network, Peer-to-peer, Gaming, and Career and Education categories, had the option for users to contribute to or interact with the website in a meaningful way using 'post content' functions.

This feature is termed differently across websites, for example, 'create a post' on facebook.com, 'tweet' on twitter.com, 'post' on linkedin.com, and 'sell it' on ebay.com. The 'reply' feature allows readers to directly address each individual comment and start conversation threads. Instead of having to respond a long way after the original post, reply features make direct interaction with individual posts easier and connect relevant conversations. Some websites prioritize comments based on their popularity by displaying the most active and engaging replies at the top of posts. Reply features were often embedded in Social Network, Arts and Entertainment, and Gaming sites. However, 34% (N=12) of the websites that have the posting feature did not allow users to reply with specific comments.

Many websites utilize buttons in the form of 'like' and 'dislike', 'thumbs-up' and 'thumbs-down', or 'heart' and 'broken heart' icons. This was especially the case on Social Network, Arts and Entertainment, and News and Media sites. These buttons act as a voting system for website visitors to rate posts, comments, and products. The 'like' and 'dislike' voting system can simply reflect people's approval or disapproval and personal attitude towards content. With this feature, it is easier for readers to find desirable content according to the majority attitude. At the same time, it allows website operators to collect user preferences on website content for marketing purposes by analysing voting results. The cue of a post might be judged by the public, potentially affecting the content posted. It may tempt users to post content that is similar in sentiment to public opinion in order to get recognition from the mass. Interestingly, while 16 websites from diverse categories utilized 'like' buttons for users to give positive feedback to content posted on their web pages, only half of them (N=8) also utilized 'dislike' buttons allowing users to give negative feedback.

Twelve websites from our audit provided community groups or channels for

people with common interests to join and interact. The 'Group/Channel' function appeared under different labels across websites, for instance, linkedin.com uses 'Groups', oce.leagueoflegends.com uses 'Clubs', and gamefaqs.com uses 'Boards'. In contrast, 21 websites provided 'private chat' features allowing real-time interaction between connected users whereby the user may send a message directly to a target receiver without the presence of others. Sites with private conversation functions were found in the Search Engine and Reference, Arts and Entertainment, Social Network, Career and Education, Peer-to-peer and Gaming categories. Interactions taking place in private one-to-one conversations may create more explicit social cues compared to group discussions.

User Interaction also incorporates the option to 'share content' from one website to another or via e-mail. Forty-four percent (*N*=24) of websites utilized this feature, allowing site users to share content to other popular social media sites, which might potentially increase the audience reached, and help websites to promote themselves and attract new users at a minimum cost. Site users also benefit from the convenience of sharing interesting content to their own social media page, facilitating further discussion.

'View counts' were displayed mostly in video podcasts and streaming sites from Arts and Entertainment as well as Gaming categories. View counts generated by site visitors provide an indication of the most popular content. Site visitors' decisions could be guided by the view count, with users tending to watch or read outstanding content. The count displayed potentially implies what sort of content users in the particular site are typically interested in. Similar to 'view count', an individual user's 'number of followers' is another potentially influential element of User Interaction.

Presumably, this feature only relates to sites allowing user interaction, e.g., social networking sites. Displaying the number of followers a user has provides information about their popularity and his/her past engagement with others users. A larger number of followers is generally preferable, and other users' follower counts becomes a reference for decision-making, for instance, about what content to post or what comment to make so that people might be more willing to follow their account. Some peer-to-peer websites also utilized this feature on their user page, making it easier for site visitors to discover popular and reliable vendors, thereby acting as a cue for trustworthiness.

Compared to other website categories, Online Wagering (N=2) and Online Gambling (N=0) sites had a minimum number of features allowing user interaction due to privacy and policy limitations.

Relational Strategic Emphasis Features

The purpose of relational strategic emphasis features is usually to build new relationships or maintain existing relationships between website operators and Internet users and/or business partners (Curty & Zhang, 2013). Websites developing relationships started with Register and Connection features involving third party social networking sites, and then used Website Quality and Help/Support features to increase users' trust towards the website and maintain relationships. Online Gambling and Online Wagering sites used the most relational strategic emphasis features (N=51 and N=47, respectively).

Register features initiate the relationship between websites and site visitors, increasing users' engagement with the website and helping website operator to obtain and collect user information for building membership profiles and targeted promotions.

When websites required users to 'Register a unique account', personal details such as first name, last name, address, e-mail address, and phone number were collected. Thirty-three from the total 55 websites required users to provide personal information in the sign-up process. Alternatively, some websites allow users to 'sign in with an existing account' from other websites, most commonly using Facebook, Twitter, and Google accounts. However, this feature typically involves sharing of large amounts of personal information across platforms. Access to and potential use of personal information differs across sites and may not be clearly stated in a conspicuous position. Signing in from a third-party account may allow Facebook to track activity with the new account and add it to the user's profile, which is in turn used to target advertising, whilst potentially also giving the website access to user data, activity records, and connections from Facebook.

All Gaming sites and the majority sites in Search Engine and Reference, Arts and Entertainment, as well as News and Media categories only required the user to provide an email address or username when signing up. A simple registration process requiring only an email address or username to sign up may attract more website visitors to sign up. As people may be concerned about personal information being resold or reused for targeted advertising or online tracking, requesting as little information as possible and making the process as fast as possible might be favored by website users. However, when users can use website functions anonymously, rules and norms from 'offline' life may no longer apply, potentially fostering risky behavior.

Some websites took an active approach to increasing sign-ups by popping up a sign-up form when a new user opens the website. Websites may also display benefits of membership to encourage users to sign up. Our audit found that 15 sites employed 'sign-up benefit' features. For example, the following sentence was stated on

hotelscombined.com: 'Members get access to daily hottest deals, member-only rates and more'; booking.com promoted 'Subscribe to see Secret Deals. Prices drop the moment you sign up!'; and jackpotcitycasino.com used signs stating 'GET YOUR A$1600 FREE' and 'Get your exclusive offer new' on the landing page to motivate players to sign up.

In addition to registration features, websites often encourage users to 'connect to the website' either via third-party social networking sites or by subscribing to newsletters. Various connecting methods were available across different website categories including email subscription and connection via Facebook, Twitter, Instagram, Tumblr, Pinterest, YouTube, Google Plus, and Blog. Seventy-three percent of websites (N=40) in our audit used email subscription to push marketing and promotion feeds to users, which may also provide a convenient and direct method for websites users to receive regular communications. Twitter and Facebook were the two social networking sites used most frequently for extending connection and communication with users outside of the original website.

Website Quality and Reputation may be another important consideration for users about whether or not to use the website. Twelve websites from our audit used 'user counts' to demonstrate the website user community size to new website visitors. User counts could relate to either active user numbers or registered user numbers. In addition, 14 websites presented their 'ranking' among similar websites as an indication of the reliability and popularity of the website.

Displaying a 'security seal' is another common relational strategic emphasis feature with the intention to build trust. Security seal are certificates or icons indicating security protection provided by a third party that allows secure connections from a web

server to a browser, also known as SSL certificates. Norton Secured and Verisign

Secured were the most common SSL certificate icons observed. Some websites used

more than one SSL to certify different types of information held by the website, for

example, private customer information and credit card transactions. All five Online

Gambling websites and four out of five Online Wagering websites displayed SSL icons

conspicuously. By displaying these certificates, websites send social cues to users about

safety and authentication of their connection.

'Help/Support' features with social cues were used to increase site users' loyalty

and prevent loss of users. On most websites, communication channels such as email,

telephone numbers, on-site real-time chat functions, and help forum were available for

technical or service problem-solving and assistance. An 'email the website' function

was the most common method provided for users to seek support from the website.

Forty-five out of 55 websites communicated with users via email for problem-solving.

A 'help forum' feature appeared in multiple website categories where there was

relatively less need for instant help. Nine websites adopted a 'live chat' feature to solve

user inquiries in a timely fashion, with six of them from the Online Wagering and

Online Gambling categories. Twenty websites provided a 'phone call' option to assist

users using the website. Many of them had multi-language service, for example,

au.royalvegascaisno.com's telephone service was available in English, Dutch, Finnish,

French, German, Greek, Italian, Japanese, Portuguese, Spanish, and Swedish.

Transactional strategic emphasis features

Transactional strategic emphasis features were only found in eight out of 10 categories.

Hotel Booking and Online Gambling sites had the largest total number of these features

(N=28). Features relating to purchasing function usually used social cues to accelerate

the customer's decision-making process. Commonly found on Online Merchandise, Peer-to-peer and Hotel Booking websites, features such as limited time offer, limited product remaining, seller ratings, and bid values of other buyers were displayed and designed as part of the transactional strategy to stimulate immediate sales.

Within the Online Merchandise, Hotel Booking, and Online Wagering website categories, 'limited time deals' with countdown meters or 'limited product left' signs were often observed. By displaying 'limited time deal' and 'limited product left', the websites may stimulate customers to place their orders without delay. Given the nature of online wagering, countdown meters are commonly used in live betting to indicate time remaining for particular promotions in an attempt to increase the player's betting incentives.

Sites displayed 'seller ratings' to build trust between the merchant and potential customers by providing real feedback from past customers. Seller ratings were made to the vendor or merchandiser, instead of in relation to single products. This feature may integrate customer opinions as an important marketing tool to instil trust in future customers and give them reason to buy from the seller. The past buying record of buyer or selling record of the vendor can be accessed on the majority of websites in Online Merchandise, Peer-to-peer, and Hotel Booking categories. These records typically include the type of product purchased and sold, as well as the amount of product purchased and sold.

ebay.com.au, gumtree.com.au, and tradingpost.com.au from the Peer-to-peer category had bidding section within their websites. The offered price of each bid would not be seen by others on gumtree.com.au and tradingpost.com.au, while the number of bidders, bidders' username initials, and bid amounts were displayed on ebay.com.au.

The sense that others are also interested in a product potentially cues other bidders to continue bidding or put in higher bids.

One piracy material sharing website was found in the audit: extratorrent.cc. Two unique transactional strategic emphasis features were found on this site: recommending use of Virtual Private Networks (VPNs), and providing a free download service for pirated material. Music, movies, and TV series are the most common material found on piracy download websites. These websites act as platforms by providing links to third-party torrent providers; thus, users' security and safety cannot be assured when accessing the torrent files. VPNs allow users to access private networks securely and to share data remotely through public networks. Websites often encourage users to use a VPN in order to hide their physical location—the user's actual IP address is replaced by the VPN provider—allowing the user to bypass content filters. Of the 55 sites audited in this study, extratorrent.cc was the only site displaying this warning to site visitors. This website used conspicuous flashing warning images and text in red, stating 'Safety recommendation: Download Torrent Anonymously!' and 'Your IP address is: xx.xx.xx.xx. Location is xx. Your internet provider and government can track your torrent activity! Hide your IP address with a VPN!'

The following transactional strategic emphasis features were observed exclusively on Online Gambling and Online Wagering websites: displaying jackpot amounts, displaying the latest winner with the amount won, and offering practice play. 'Progressive jackpot amount' was displayed on all online gambling sites investigated in this study. This amount was typically changing constantly. Larger jackpots may attract more gamblers, and higher bets might be placed. The display of 'latest winner and amount won' varied across Online Gambling sites. Some sites displayed the first name and last name initial, or the initial for both first and last names of the winner, whereas

others only displayed the type of game played and the amount won. Four out of five online casino sites provided practice play for site visitors to experience their games free of charge, allowing players to become familiar with game surface and betting processes.

Discussion

Forty-eight unique features with potential social cues were identified from the 50 websites audited and were classified according to the strategic emphasis framework proposed by Curty and Zhang (2013). According to signal theory, signals sent by website features may have the impact of on external vs. internal cues on consumer behavior (Wells et al., 2011).

This study had a relatively small number of cases for each category, limiting its statistical power and ability to establish more generalizable conclusions. Website features among various categories were constantly changing. Curty and Zhang's (2013) framework was created to examine e-commerce sites but was applied in this study to all website categories. Some features may serve more than one strategic emphasis, but this study related each feature to only one strategic emphasis group based on their main characteristics. The results of the audit are aligned with the website strategic emphasis framework.

Despite its limitations, this research provides two primary contributions. This study investigated a broad range of different websites, whereas most of the existing website feature studies focus solely on e-commerce websites. More importantly, this study identified a list of potential features with social cues that may influence online decision-making with the intention of providing a foundation for further research. Research on the impact of cues on individuals' health-related decisions in the physical environment has already been undertaken by Marteau and colleagues (Marteau,

Hollands, Fletcher, & Munafo, 2017). Similar research on environmental cues may be beneficial for understanding online risk-taking behavior. By enriching our understanding of the impact of website feature design on decision-making, further research in this area is necessary to address increases in online risky behavior, given rapid growth in online activity more broadly.

This research may also advance policy and strategy in the area of online risk-taking and identify steps that can be taken by individuals and policymakers to reduce the impact of purposefully deceptive or manipulative websites. As a first step to exploring website features that may trigger online risk-taking, this study serves as a directory of website features for empirical assessment. The next steps are to use the current research to undertake empirical and applied investigations to understand how consumers respond to various social cues across different risky online settings. Using theoretical knowledge and empirical findings, policies can be enacted to prevent of social cues that may deceive consumers. Website operators may opt-in or be required by regulation to enact social responsibilities by providing better user protections, for instance, displaying warning information or requesting explicit consent from the user when they first start to use functions and features involving social cues that may incentivize risky behavior. Public health communication may also be used to educate consumers to identify potentially deceptive social cues and avoid websites that utilize these cues.

Declaration of Interest

The authors have no conflicts of interest to declare.

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Appendix A

List of websites audited by category

Category	Website	Category	Website
Arts and Entertainment	youtube.com	Hotel Booking	booking.com
	buzzfeed.com		expedia.com.au
	gfycat.com		au.hotels.com
	vimeo.com		agoda.com
	extratorrent.cc		hotelscombined.com
Social Network	facebook.com	Peer-to-peer	ebay.com.au
	reddit.com		gumtree.com.au
	linkedin.com		ozbargain.com.au
	Instagram.com		airbnb.com
	twitter.com		tradingpost.com.au
Online Merchandise	amazon.com	Gaming	twitch.tv
	jbhifi.com.au		gamefaqs.com
	target.com.au		store.steampowered.com
	aliexpress.com		oce.leagueoflegends.com
	officeworks.com.au		au.ign.com
News and Media	yahoo.com	Online Wagering	sportsbet.com.au
	smh.com.au		tab.com.au
	theladbible.com		williamhill.com.au
	theguardian.com		unibet.com.au
	dailymail.co.uk		ladbrokes.com.au
Career and Education	seek.com.au	Online Gambling	jackpotcitycasino.com
	stackoverflow.com		casino.com
	indeed.com		casino.spinpalace.com
	github.com		onlinecasino.com.au
	jora.com.au		au.royalvegascasino.com

Appendix B

Websites features and characteristics by strategic emphasis type

Relational Strategic Emphasis Features	Register	Personal detail is required when signing up
		Allows use of other social media accounts to sign in
		Only need an email address or username to sign up
		Encourages sign-up with benefit and rights
	Website Quality / Reputation	Displays users count
		Security seal displayed
		Website ranking / comparison to other similar websites
	Help / Support	Help forum, request form, or message board
		Live chat
		Phone call
		Email
	Connection with Website	Facebook
		Twitter
		Instagram
		Tumblr
		Pinterest
		YouTube
		Google Plus
		Blog
		Subscription to the website
		Other
Social Strategic Emphasis Features	Other Users' Testimonial and Action	Write review
		Write anonymous review
		Vote on helpfulness of reviews
		Product sell count
		Recommendations based on other customers' purchase activity
		Last time product was viewed/purchased
		Post view count
		Active site user count

		Post content
		Anonymous post
		Reply to other users' posts
		Like a post
	User Interaction	Dislike a post
		Join a group/channel
		Private chat
		Directly share content to other social media
		Open access of user profiles
		Displays number of followers
Transactional Emphasis Features	Purchase	Limited time offer / limited product remaining
		Ratings of seller, vendor, merchant
		Past record of buyer/seller
		Displays maximum bid of buyer
	Gambling	Jackpot amount
		Latest winners with amount won
		Practice play
	Other	Pirated material for free download
		Encourages use a VPN