

Library collections promotion for preadolescents using social media marketing strategies

Library
collections
promotion

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Abstract

Purpose – This study aims to explore preadolescents' opinions of the social media marketing strategies hosted by libraries to promote collections.

Design/methodology/approach – An experimental Facebook page was created with posts containing interesting animations, games and book recommendations. A questionnaire survey was administered to 262 preadolescents between 11 and 13 years old to seek their opinions about the posts, and confirmatory factor analysis was used to measure their acceptance of the marketing strategies.

Findings – The authors examined the effects of five marketing strategies: word-of-mouth marketing, buzz marketing, event marketing, viral marketing and gamification marketing. In terms of sharing, word-of-mouth marketing proved the most popular, followed by buzz marketing. Participants were least accepting of viral marketing. The authors found that gamification marketing resulted in higher engagement than did event marketing. The preadolescent participants preferred engagement marketing strategies over information sharing strategies.

Originality/value – According to the uses and gratification theory, preadolescents seek, share and engage with information in ways that differ from other age groups. With specific reference to hedonic engagement by preadolescents, the authors built a two-fold model to describe the information-seeking behaviors of preadolescents from the perspective of marketing strategies. The study findings indicate that librarians who use Facebook to promote library collections should first employ gamification and word-of-mouth marketing to build trust with preadolescent users. Event and buzz marketing will then be more effective when applied within the context of this trust.

Keywords Children's digital library, Social media service, Library promotion, Information engagement, Information seeking, Confirmatory factor analysis

Paper type Research paper

Introduction

Under the concept of Library 2.0 proposed by Casey and Savastinuk (2007), Nguyen *et al.* (2012) suggested that libraries should market their services on social media platforms to connect with potential users, especially young people. Several researchers have since confirmed the opportunities represented by social network services (SNSs) for the promotion of library collections (e.g. Grgic, 2013; Wallis, 2014; Jones and Harvey, 2019). Chen *et al.* (2012) suggested that to improve the efficiency of interactions with users on SNSs (which includes knowledge sharing, information dissemination, communication and knowledge gathering), libraries should coordinate their activities across different types of SNSs and exploit the unique characteristics of information-marketing channels. They also found that academic library patrons were more likely to engage in social media to communicate with librarians, while public library patrons are more likely to use social media for knowledge sharing.



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Marketing researchers have investigated the topics of persuasive messages, popularity cohesion and message diffusion within the field of social media marketing (Chang *et al.*, 2015). SNS marketing strategies include word-of-mouth (Kumar *et al.*, 2017), buzz marketing (Holdford, 2004), viral marketing (Goyette *et al.*, 2010), gamification marketing (Hsu and Chen, 2018; Lucassen and Jansen, 2014) and event marketing (Cant, 2016).

Preadolescents increasingly use information and communication technologies (ICTs) for social communication (Areepattamannil and Khine, 2017). Lu (2010) pointed out that because fifth and sixth graders (i.e. children who are 11–12 years old) are in a transitional developmental stage, they employ a varied range of information-seeking and coping strategies in their day-to-day life. Sua *et al.* (2018) examined sixth graders' motives underlying SNS use and found significant differences among individuals. Valkenburg and Peter (2007) reported that preadolescents use SNSs to form and maintain friendships. This has prompted researchers to ask whether librarians could form friendships with young library users as a vehicle for marketing library services and collections. Grgic (2013) found that school librarians in Croatia used Facebook on a basic level and tended to publish irrelevant content. This meant young library users were unlikely to engage with their libraries online. Thus, our research objective was to examine the effects of information-sharing and engagement marketing strategies implemented by libraries on the opinions of preadolescent users.

Literature

Preadolescent use of social network services to build trust

Berdot-Talmier and Zaouche Gaudron (2018) reported that French children between 9 and 12 years old experience socio-affective adaptation through Facebook use. Communication with unknown individuals and celebrities represents a risk factor. Communication with friends represents a protective factor. Kopecký (2016) pointed out that many Czech children under 13 years old use Facebook to build virtual friendships. Facebook can help to build people-to-people contact and overcome social isolation. It also offers a platform for users to express their views and comment on current affairs. Nesi *et al.* (2018) found that social media transforms adolescent peer relations and dyadic friendship processes.

Fandakova and Gruber (2021) pointed out that curiosity and interest have positive effects on learning and memory for both children and adolescents. Gray (2018) suggested that both age and gender differences influence the way users interact on SNSs. She found that maturation impacts the frequency of SNS use, especially for users around 8–9 years old. A significant difference was also observed in users between 10 and 11 years old, who tended to report that they had experienced something online that had upset them.

Chen *et al.* (2015) pointed out that the increased use of social media for information sharing has stimulated the need for information literacy, which helps guard against the transfer of misinformation. The sharing of misinformation is affected by factors such as perceived characteristics of the message (e.g. good topic, interesting or eye-catching), self-expression and the desire to socialize. Kim *et al.* (2014) noted that libraries seeking to use SNSs for the promotion of library collections to undergraduate students must consider information literacy, including students' learning strategies for the evaluation of information and the creation of quality information. Gauducheau (2016) investigated how teenagers use online forums to search for information and found that the advantages of social media for teenagers include finding specialized information on specific topics and collaborative information seeking. Turcotte *et al.* (2015) explored the effects of trust on information-seeking behaviors and found that news recommendations from friendships formed on Facebook improve levels of media trust and prompt users to follow more news from that particular media outlet in the future. Koroleva and Kane (2017) found that the way that users perceive information on Facebook is influenced by the tie strength of their Facebook friendships. Heuristic cues (such

as Facebook “Likes”) allow users to form a quick impression of the shared information, which reduces cognitive load. “Likes” are less influential when ties are stronger. Comments require more cognitive load, so these evoke negative responses when the commenter has a weak tie with the user. Therefore, a user prefers to find information from sources with which they have strong ties (i.e. trust).

Preadolescents often experience periods of emotional turbulence associated with identity formation and role development (Erikson, 1993). They may gradually shift from a focus on family to a focus on social relationships with peers and often adopt online applications to help them with this process. Sua *et al.* (2018) investigated the motivations underlying SNS use by sixth graders (aged 11–12 years) in Taiwan. Among connecting, sharing, relaxing, branding, organizing, monitoring, expressing and learning, the sampled sixth graders were primarily motivated by connecting with others.

Information sharing and engagement with library social network service posts

Peacemaker *et al.* (2016) found that events, news and announcements were the most common topics in the social media communications initiated by academic libraries. However, they also found that few libraries exploit content strategies for their social media accounts to help define the tone and engage audiences as well as to effectively manage their accounts. Joo *et al.* (2018) examined different types of social media content published by public libraries to communicate with users online. They investigated the relationships between content types and corresponding levels of user engagement. The most frequent type of post was related to announcing upcoming library events. Posts about community news or inspiring messages prompted high engagement from users, as did posts with images. Winn *et al.* (2017) investigated engagement rates for social media using four university libraries in Canada. Their results showed that the libraries with the least posts had the highest levels of user engagement. They suggested further research into the effects of social media trends on information literacy in libraries.

Koranteng and Wiafe (2019, p. 1213) pointed out that “the connective power of SNS is being continuously harnessed to further engage academics and promote knowledge sharing activities.” They applied the social capital theory to explore the relationships between the use of academic SNSs, engagement and information sharing. Among dimensions such as social interaction ties, trust, reciprocity, shared language, shared vision and identification, identification is the only significant predictor of engagement, which has been shown to support information sharing. In this study, we sought to create a model to reflect the specific features of preadolescent development, i.e. building their own identities, forming popularity cohesion with their friends on SNSs and demonstrating unique information seeking behaviors for specific topics. We, therefore, propose a two-fold model based on cohesive sharing and strategic engagement for library online marketing.

Leiner *et al.* (2018) revealed the functional domains underlying the individual usage of Facebook features based on user gratification and expectation. They grouped 35 features into five domains: contribution, gaming, friend management, content consumption and group coordination. All functional domains exhibit differing ratios of contribution to consumption of social media content, with different expectations for gratification. We applied a similar concept to incorporate marketing strategies into our sharing and engagement model. The sharing dimension focuses on how knowledge/information/messages diffuse in different communities, the scope of communication, popularity, spreading speed and the level of interactivity through preadolescent cohesive channels. The engagement dimension emphasizes appealing strategies/actions/topics to engage preadolescents to stimulate their motivation to use library resources.

Social media marketing

[Cahill \(2011\)](#) suggested that the most effective methods of marketing for libraries include word-of-mouth marketing, emergency information broadcast, community engagement and the solicitation of feedback. Librarians tend to concentrate on communicating the mission and vision of the library, segmenting target audiences in advance, addressing customized messages to users, generating a wide variety of content, regularly updating and monitoring reflections and making posts in a user-friendly format ([Steiner, 2012](#); [Tomlin, 2014](#); [Alman and Swanson, 2014](#)). [Luo et al. \(2013\)](#) found the following strategies help library staff to use video-sharing sites as a marketing platform: basing video content on campus life, reflecting what students experience in their everyday activities, conveying content in a humorous, light-hearted and refreshing style, employing social media to share content and engage the target audience and partnering with students. However, further research into systematic marketing strategies targeted at attracting preadolescents to use library resources are needed.

In their studies into message diffusion (i.e. sharing), [Kietzmann and Canhoto \(2013, pp. 147–148\)](#) defined electronic word-of-mouth (eWOM) as “any statement based on positive, neutral, or negative experiences made by potential, actual, or former consumers about a product, service, brand, or company, which is made available to a multitude of people and institutions via the internet.” [Litvin et al. \(2008\)](#) proposed the following two-dimensional typology of media used by eWOM: the scope of communication and the level of interactivity. [Goyette et al. \(2010, p. 9\)](#) defined buzz marketing as “a catalyst for a WOM conversion to occur in person or online derived from a formal corporate strategy with a view to creating an illusion of spontaneity.” They further defined viral marketing as “a rapidly spreading informal online communication between individuals regarding a service or product” ([Goyette et al., 2010, p. 9](#)). Buzz marketing and viral marketing function as eWOM with different communication scopes, interactive levels and time factors, with varying results. Preadolescents emphasize peer relations, which influences their information-seeking behavior. This means that library marketing strategies must be tailored to suit them.

In their exploration of popularity cohesion (i.e. engagement), [Oh and Syn \(2015\)](#) analyzed what motivates users to share their personal experience, information and social support with strangers on SNSs such as Facebook, Twitter, Delicious, YouTube and Flickr. They found that motivations included enjoyment, learning, personal gain, altruism and social engagement. [de Oliveira et al. \(2016\)](#) researched factors driving the engagement of young Facebook users. These included subjective norms, social identity, entertainment value and maintaining interpersonal interconnectivity. Enjoyment is a major motivator engaging users in SNS use to form popularity cohesion. [Hsu and Chen \(2018\)](#) found evidence that activities related to gamification marketing motivate desirable consumer behaviors. Game play is full of entertainment value and is a useful strategy to engage young Facebook users in searching library collections. [Verdoodt et al. \(2016\)](#) explained for children, an “advergame” capitalizes on the fun offered by a game by creating positive brand awareness and a positive effect on brand recall and attitude toward the product/service. [Verdoodt et al. \(2016\)](#) also warned that usage of advergames as a marketing technique aimed at children without safeguards is questionable at best. Within the context of libraries, applying advergames to promote the use of library resources is more ethical than the general use of this technique to increase consumer consumption.

Event marketing is viewed as “a communication tool whose purpose is to disseminate a company’s marketing messages by involving the target groups in experiential activity” ([Drenger et al., 2008, p. 138](#)). [Harb et al. \(2019\)](#) investigated the intentions of 189 fans to attend events using SNSs. They found perceived enjoyment influences the attitudes of event fans toward using SNSs as a tool to learn about events that they are interested in attending. [Cant](#)

(2016) indicated that event marketing can help promote small-to-medium enterprises (i.e. children's libraries), but the majority of the 992 enterprises investigated were not aware of how to properly use SNSs to promote events. It would be worth developing strategies to overcome this lack of knowledge, as library events have proven an effective method of engaging preadolescents in library resources and increasing their enjoyment.

Research model

Observed variables for word-of-mouth marketing. Shen *et al.* (2016) suggested that among preadolescent needs (for autonomy, competence and relatedness), the need for relatedness exerts the greatest influence on word-of-mouth marketing. This marketing strategy is motivated by self-enhancement (*w1*), concern for other consumers (*w2*), helping the company (*w3*), economic incentives (*w4*) and social benefits (*w5*).

Observed variables for buzz marketing. Henry (2003) explored the topic of buzz among adolescents, identifying seven steps to creating buzz: know brand identity, identify the influencers, innovate, seed the idea, observe and analyze, extend the campaign and integrate with awareness-generating media. Carl (2006) expanded the framework of buzz marketing to include everyday communication and casual conversations about brands. Mohr (2007) pointed out that the advantages of buzz include increasing visibility, generating conversions and increasing credibility. We referenced these studies to select three observed variables for this factor: conversion (*b1*), idea-seeding and credibility (*b2*) and everyday conversation (*b3*).

Observed variables for viral marketing. Borges-Tiago *et al.* (2019) explored user motivation to participate in viral communication, identifying four influential factors: social pressure (*v1*), emotional tone (*v2*), meaningfulness (*v3*) and arousal (*v4*).

Observed variables for event marketing. Holidays such as Christmas or Valentine's Day are annual events associated with extensive marketing campaigns. Close and Zinkhan (2009) examined consumer resistance toward holiday marketing, including gift resistance, retail resistance and market resistance. A consumer that is gift resistant will set limits on the giving or exchanging of gifts. A retail-resistant consumer will avoid specific stores around certain events or holidays. Market-resistant consumers do not engage in culturally established ritualized marketplace behaviors. Ozawa *et al.* (2017) explored collaborations between offline and online event marketing. They recommended personalized invitations and creating a session registration page on the event's website. We selected four observed variables for event marketing: retail event (*e1*), market promotion (*e2*), gift-related event (*e3*) and invited information (*e4*).

Observed variables for gamification marketing. Vanwesenbeeck *et al.* (2016) proposed that marketing conversion is positively correlated with game flow and self-reported player emotion. They found pleasure to be the most influential factor in terms of conversion and the feel-good factor of the game had the highest weighting in terms of player emotion. We hypothesized that in the context of libraries, after engaging with a game story, preadolescents would experience similar emotions to those delivered by reading stories. We, therefore, selected the following four observed variables for gamification marketing: trust (*g1*), love (*g2*), friendship (*g3*) and playfulness (*g4*).

Hypotheses

This study focuses on user engagement with social media content posted by libraries, with the specific target of preadolescents. Preadolescents exhibit unique developmental features as they transition from the information-seeking skills of children (skills developing and domain-specific) to those of adolescents (rule-bound and socially based). While there is evidence that the factors of the uses and gratification (U&G) model do influence preadolescents' Facebook use, a systematic integration of content analyses and marketing

strategies may be helpful for the creation of effective library posts for preadolescents. This study, therefore, developed a sharing and engagement model comprising five marketing strategies to explore the following research hypotheses:

- H1. Preadolescents' sharing of librarians' book recommendations on SNSs depends on the marketing strategy used to create the post (i.e. word-of mouth, buzz or viral marketing).
- H2. Preadolescents' engagement with librarians' book recommendations on SNSs depends on the marketing strategy used to create the post (i.e. gamification or event marketing).
- H3. Preadolescents share and engage with librarians' book recommendations on SNSs.

Research method

Participants

The first pilot experiment included ten elementary students in New Taipei city aged 10–11 years old (five males and five females). The second pilot experiment included ten elementary students in New Taipei city aged 11–13 years old (five males and five females). The participants of the final experiment comprised 262 elementary school students between the ages of 11 and 13 from Taipei City, including 144 male students (54.96%) and 118 female students (45.04%). All participants were randomly selected using cluster sampling of elementary schools in the Taipei region. In all experiments, consent was obtained from the parents/guardians of all participants.

Experiments

Experts and preadolescents participated in a two-phase pilot experiment to explore appropriate survey questions related to marketing strategies. In the first pilot experiment, eight posts with photos were grouped into four different categories (monthly book recommendations, funny videos, library event promotion and popular buzz). These were posted on a Facebook page (<https://www.facebook.com/groups/1032652786857335/?ref=bookmarks>). The participants were gathered in a classroom with our investigator on February 24, 2017, to review these posts. The post with the most “likes” was a funny video called “Grandpa’s Heaven note” (このあとどうしちゃう). The students then answered a questionnaire (on a five-point Likert-type scale) comprising 20 items measuring their attitudes and behavior regarding Facebook. The participants expressed that they like to share their opinions on books they are reading, and that they also like to play games that improve their reading literacy. The mean for each question is as follows: (1) “When I saw the interface of Facebook, I immediately knew how to use it” (M: 4.1); (2) “I thought it fairly easy to get started on Facebook” (4.0); (3) “I update my status on Facebook every day” (3.0); (4) “I leave a comment when I see something interesting on Facebook” (3.3); (5) “I write comments on the Facebook pages of my friends” (3.8); (6) “I like to post interesting things on Facebook” (3.4); (7) “I share articles that I find inspiring on Facebook” (3.2); (8) “I think Facebook is a good place to absorb a diverse range of knowledge” (3.6); (9) “I click ‘like’ when I see an interesting article on Facebook” (3.7); (10) “My curiosity is triggered by funny animations on Facebook” (3.7); (11) “I think reading Facebook articles about children’s books is more fun than reading physical books” (3.9); (12) “I like to join activities held by Facebook if the activities include freebies” (4.2); (13) “Watching the Ciaohu (Eric/shimajiro) cartoons on Facebook increases my interest in reading that book” (3.3); (14) “I would like to join a Facebook group to get the chance to meet new people online” (2.6); (15) “I think that recommendations of children’s books made by a library on Facebook may improve my interest in reading” (3.3); (16) “I would share my ideas

about a book with peers on Facebook” (3.3); (17) “A library that joins Facebook would spark my interest in it” (4.7); (18) “I like to play fun games on Facebook” (4.4); (19) “If the games shown on Facebook can improve my reading comprehension, I would try them” (3.8); and (20) “I am interested in riddle guessing games on Facebook, because I can get a mascot if I get all the answers right” (4.1).

A primary school teacher, with five years’ experience teaching preadolescent reading, was invited to review and revise the posts. She suggested designing the posts to match preadolescent reading abilities. She also emphasized that post content must be carefully worded to ensure they are easy for preadolescents to understand and suggested including more images. Further recommendations included offering readers a lottery after reading, posting a short film and short e-books to grab readers’ attention and creating buzz on a popular topic such as Pokémon, as well as posting interesting activities approved by parents and reading games of varying difficulty levels.

In the second pilot experiment, the participants were gathered in a classroom with an investigator on March 29, 2017, to review ten posts. The most popular was a buzz post on the origin of Dragon Boat Festival with a Pikachu symbol.

Following the results in the first and second pilot, we designed 20 library promotion posts aimed at preadolescents for Facebook. These are shown in [Table 1](#). These 20 posts reflected different subjects and represented different marketing strategies. All post material was collected from public libraries in Taiwan and the Ministry of Cultural Affairs, Taiwan. We designed each post to relate to one of the observed variables. For example, for viral marketing, we focused on time-sensitive content: “BIG GIVEAWAY: ‘Like’ to read the newest Harry Potter book for FREE! First 10 people only!” For buzz marketing, as the time of the experiment was around April, we used the following post: “Time for Chibi Maruko-chan to go ‘Fuchiko’!! Do you know what month cherries ripen every year? The answer is April! Did you guess right?” For word-of-mouth marketing, we used topics that would appeal to children from many different backgrounds: “Did you know that every adult used to be a child? To give you an idea of what adults did when they were young, we recommend ‘The Little Prince’, which is one of the bestselling books in the whole world! We highly recommend it!” For event marketing, we created a holiday event: “In celebration of Children’s Day (April 4), kids who borrow a book from our library can play a game, such as poke-and-win-a-prize. Free marble labyrinth for those who borrow 10 books!” For gamification marketing, we invited users to play “The Stone Lion” game. Each first-order latent variable had at least three observed variables for confirmatory factor analysis (CFA). A two-layer CFA model with two second-order latent variables (sharing and engagement) and five first-order latent variables (word of mouth, buzz, viral, event and gamification marketing) were used to explore how preadolescents perceived librarians’ promotion messages on Facebook. We used the structural equation modeling software LISREL to perform CFA. In the final survey, the participants were gathered in a classroom to review posts shown on a projector screen. Their opinions were collected by questionnaire. A five-point Likert-type scale was used (1 – strongly dislike to 5 – strongly like).

Results

In the final experiment, we collected information on the amount of time each participant spent on Facebook; most participants (41%) spent less than 1 h per week, followed by 1–4 h per week (40%). We also asked how much time participants spent online overall (including time spent on Facebook): most participants (39%) spent 1–4 h online per week, followed by 4–8 h per week (22%). We also collected data on the number of Facebook friends: most participants (32%) had ten friends or less, followed by 10–30 friends (21%) ([Table 2](#)).

Item	Variables	Question items	Means	SD	Skewness	Kurtosis
<i>Viral marketing</i>						
v1	Social pressure to express	BIG GIVEAWAY: “Like” to read the newest Harry Potter book for FREE! First 10 people only!	3.943	1.083	−0.615	−0.463
v2	Emotional attraction	Telling the story of Harry Potter in 90 s using LEGOs. It’s so fun!	3.954	1.060	−0.647	−0.387
v3	Meaningful content	Have you read the latest chapter of One Piece? Do you know who discovered the Americas during the Age of Discovery? The answer is Italian explorer Columbus	3.874	1.052	−0.462	−0.643
v4	Arousal action	“Like” within 89 min for a chance to win Gudetama pop-up stickers! Hurry up and “like”!	3.985	1.124	−0.834	−0.182
<i>Buzz marketing</i>						
b1	Start conversion	Have you seen Toy Story? If you have, here’s a good book for you: “PIXAR’s Collector’s Edition: Toy Story 3”	3.725	1.029	−0.343	−0.336
b2	Seed idea and add credibility	Remember the Nordic kingdom of Arendelle and Princess Elsa in “Frozen”? The sequel is coming out soon! Want to know when it’s in theaters? 100 “like s”, and we’ll tell you!	3.615	1.083	−0.462	−0.230
b3	Everyday talking	Time for Chibi Maruko-chan to go “Fuchiko”!! Do you know what month cherries ripen in every year? The answer is April! Did you guess right?	3.515	1.167	−0.423	−0.431
<i>Word-of-mouth marketing</i>						
w1	Self-enhancement	Did you know that every adult used to be a child? To give you an idea of what adults did when they were young, we recommend “The Little Prince”, which is one of the bestselling books in the whole world! We highly recommend it!	3.664	1.084	−0.465	−0.193
w2	Concerns for other consumers	One of the admins used to have a dog, so she loves reading dog books. She recommends “PAX,” which was No. 1 on the New York Times best sellers list for over 40 weeks! It’s a great read!!	3.584	1.020	−0.426	0.049
w3	Helping the company	When was the last time you played with your grandfather? Let’s watch the animated version of “What Happens Next?” Did you know that 100,000 copies of this book were sold within three days?	3.905	1.156	−0.743	−0.287
w4	Economic incentives	Art thérapie/Coloriage XXL/Monde – The world is so big! Let’s draw a circle around a map and get to know the world! That’s crazy!	3.645	1.121	−0.548	−0.133

Table 1.
Questionnaire

(continued)

Table 1.

Item	Variables	Question items	Means	SD	Skewness	Kurtosis
<i>w5</i>	Social benefits	The invention of the bicycle as it is today took hundreds of years of development and the efforts of numerous inventors! The bicycle is currently the simplest and most widely used means of transportation in the world!	3.469	1.045	−0.324	−0.117
<i>Event marketing</i>						
<i>e1</i>	Retail event	Highly recommended by the admins! My toys in your house ~ sign up for our toy exchange get-together!!	3.374	1.089	−0.176	−0.285
<i>e2</i>	Market promotion	In celebration of Children's Day, kids who borrow a book from our library can play a game, such as poke-and-win-a-prize. Free marble labyrinth for those who borrow 10 books!	3.447	1.091	−0.246	−0.290
<i>e3</i>	Gift-related event	Want to have fun on Children's Day? Come to our children's treasure hunt and get a cute little gift!	3.313	1.036	−0.199	0.045
<i>e4</i>	Invited information	Do you like treasure hunting? Sign up with a team for our children's treasure hunt! You'll receive a gift, and it's great fun!	3.424	1.069	−0.303	−0.118
<i>Gamification marketing</i>						
<i>g1</i>	Trust	Come and play "The Stone Lion" game!!	3.538	1.074	−0.343	−0.217
<i>g2</i>	Love	Come and play the "It's Springtime, Mr. Squirrel" game!!	3.492	1.099	−0.286	−0.356
<i>g3</i>	Friendship	Come and play the "Jellybeans" game!!	3.492	1.164	−0.393	−0.497
<i>g4</i>	Playfulness	Finish reading "Birds Have Wings, Children Have Books" (les oiseaux ont des ailes, les enfants ont des livr) and play a little game!!	3.340	1.119	−0.221	−0.373

Amount of time each spent on Facebook per week

0–1 h (less)	1 h (incl.)–4 h (less)	4 h (incl.)–8 h (less)	8 h (incl.)–12 h (less)	12 h (incl.) and above
107 (41%)	105 (40%)	21 (8%)	16 (6%)	13(5%)

Amount of time spent online per week (including time spent on Facebook)

0–1 h (less)	1 h (incl.)–4 h (less)	4 h (incl.)–8 h (less)	8 h (incl.)–12 h (less)	12 h (incl.) and above
34 (13%)	102 (39%)	58 (22%)	34 (13%)	34 (13%)

Number of Facebook friends

10 persons	10 persons (above)	30 persons (above)	50 persons (above)	Over 100 persons
(incl.) and below	–30 persons (incl.)	–50 persons (incl.)	–100 persons (incl.)	
83 (32%)	55 (21%)	45 (17%)	34 (13%)	45 (17%)

Table 2.
Amount of Facebook
use by study
participants

As shown in [Figure 1](#), the degree of freedom (150), chi-square (248.50), p (0.00000), RMSEA (0.050 \leq 0.05; [Browne and Cudeck, 1993](#)), GFI (0.91 $>$ 0.90; [Bentler, 1988](#)), PGFI (0.65 $>$ 0.50; [Mulaik, 1986](#)), NFI (0.97 $>$ 0.90; [Bentler and Bonett, 1980](#)), NNFI (0.99 $>$ 0.90; [Bentler and](#)

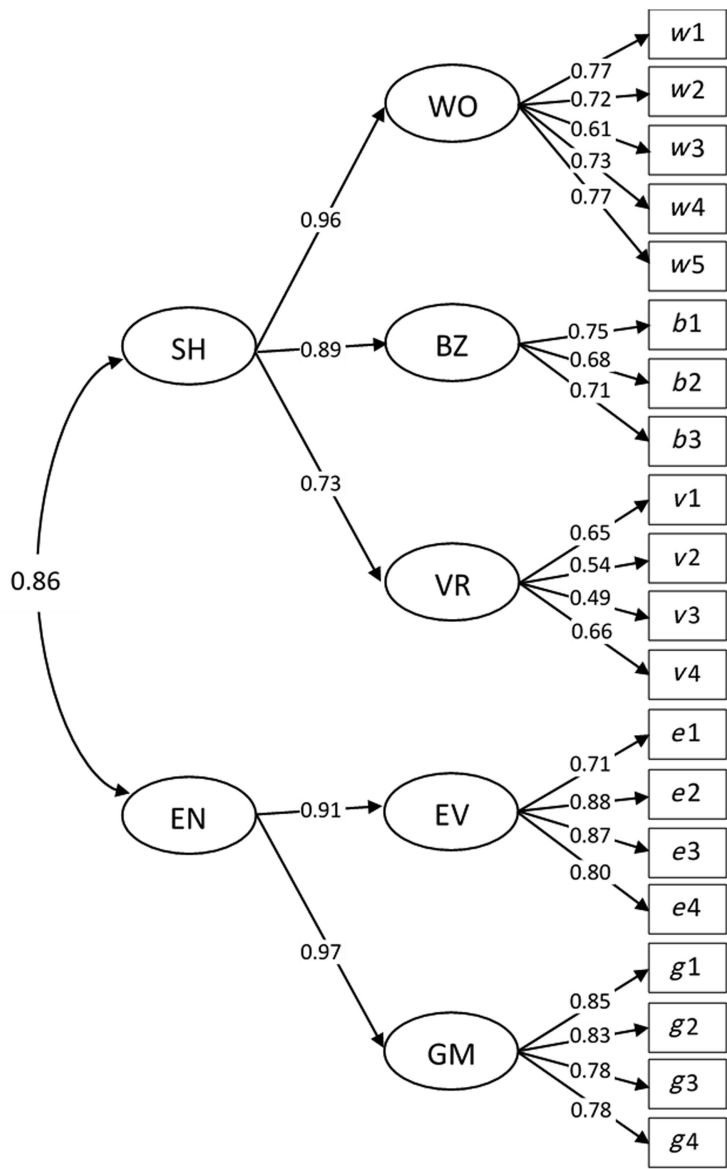


Figure 1.
CFA

Chi-Sq = 248.50, $df = 150$, $p = 0.0000$, RMSEA = 0.050

Note(s): SH = Sharing; EN = Engagement; WOM = Word-of-Mouth;
BZ = Buzz; VR = Viral; EV = Event; GM = Gamification

Bonett, 1980) and CFI ($0.99 > 0.95$; Bentler, 1988) indicate a good model fit. The AGFI ($0.88 < 0.90$) demonstrates a low degree of model complexity. Cronbach's alpha is 0.935. The standardized factor loading of latent constructs was 0.49–0.88. The t -value of the factor

loading reached 0.001 (significant). These statistics show that the convergent validity and the identification of measurement model are acceptable (Kelloway, 1998, p. 107).

In Figure 1, SH (sharing) and EN (engagement) represent second-layer latent factors for Facebook marketing strategies, and the five latent variables WOM, BZ, VR, EV and GM are word-of-mouth marketing, buzz marketing, viral marketing, event marketing and gamification marketing, respectively. The weighting of WOM on SH is 0.96, BZ on SH is 0.89 and VR on SH is 0.73. Thus, H1 is validated. The weighting of GM on EN is 0.97, and EV on EN is 0.91. Thus, H2 is validated. The correlation weighting between SH and EN is 0.86. Thus, H3 is validated.

Discussion

Word-of-mouth marketing and sharing based on trust and familiarity

For libraries, the goal of online marketing is to promote library resources to students. Our results indicate that word-of-mouth marketing had the highest weight (0.96) among the three types of sharing marketing strategies. In our experiment, the participants were affected by words such as “bestselling,” “bestsellers’ list,” “crazy” and “the whole world.” This marketing strategy is motivated by self-enhancement ($w1$, 0.77), concern for other consumers ($w2$, 0.72), helping the company ($w3$, 0.61), economic incentives ($w4$, 0.73) and social benefits ($w5$, 0.77). This indicates that as the participants were building their identities as well as exploring and accepting the views of the outside world, they tended to emphasize group–individual relationships and were thus particularly accepting of word-of-mouth marketing. This is consistent with the findings of Koroleva and Kane (2017), who found that user acceptance of Facebook information is influenced by tie strength, and preadolescents are more susceptible to word-of-mouth.

Another characteristic of word-of-mouth marketing is that it impacts user acceptance and judgment of information via trust and familiarity. Preadolescents are less experienced and require guidance from others, so they tend to trust the information obtained from Facebook communities. Gilly *et al.* (1998) pointed out that the seeker’s perception of the source’s expertise was the primary determinant of influence for word of mouth. Feldman and Lynch (1988) proposed the accessibility–diagnosticity model, which posits that the decision to apply certain information obtained from memory to real life depends on interactions between memory accessibility and information diagnosticity. Herr *et al.* (1991) further combined word-of-mouth marketing with the accessibility–diagnosticity model to investigate the impact of vividness effects, perseverance effects and negativity effects on user acceptance of information. In word-of-mouth communication, information presented in a vivid manner enhances information accessibility and thereby influences how a user judges a product. The polarity of the information also affects the strength of its influence. For example, negative information ($w4$, “That’s crazy!”) offers stronger diagnostic power than positive or neutral information. Thus, when libraries use word of mouth to promote their books, they should reinforce the impression they leave on preadolescents, share experiences to form strong recognition and complement these with lively social media posts. Using comparisons, they can highlight better and more important information regarding their collections to promote word-of-mouth marketing. They can also expand from Facebook to whole new models of digital marketing and then utilize the disseminative power of communities to spread information through friends and netizens outward layer by layer, ultimately achieving the objective of online library promotion.

Effects of information-marketing channels

Katz *et al.* (1973) proposed the U&G theory, positing that people use media to satisfy their needs. According to this theory, the participants chose different information channels to meet their needs based on the characteristics of the information they were seeking. As a marketing

channel for children's libraries, Facebook attracts users using images and videos as well as buzz marketing (0.89). [Holdford \(2004\)](#) explained that buzz marketing is an indirect communication method and most useful for ideas that are memorable. It is used to make small changes in behavior that lead to big effects over time, by reaching a tipping point among a target population. Buzz marketing is similar to word-of-mouth marketing but focuses more on the subjects under discussion ($b1 = 0.75$ – "Have you seen Toy Story?"). To engage preadolescents, the content of the posts must be relevant ($b3 = 0.71$ – "Chibi Maruko") and exciting ("Fuchiko"). [Kaser \(2007\)](#) advocated that maintaining buzz marketing requires constant creativity and a mix of fantasy ($b2, 0.68$ – "Princess Elsa") and reality to bring in the element of surprise and arouse consumer curiosity ("When is it in theaters?").

The coefficient of viral marketing was the lowest (0.73). [Goyette et al. \(2010\)](#) defined viral marketing as a rapidly spreading informal online communication that propagates across a segment of the population; it uses eWOM to advertise products at a minimum cost. However, the benefits and risks of this strategy must be carefully weighed for libraries. [Chen and Yao \(2018\)](#) explored what drives impulse-buying behaviors in a mobile auction. They found that ubiquity, ease of use, information exchange, discounted prices and scarcity affect latent variables such as impulse-buying tendency, normative evaluation and positive affect. Among the three latent variables, impulse-buying tendency most influences impulse-buying behaviors. In our experiment, there was no time urgency to the rewards offered by the library, which may have lowered the value perceived by the participants. Further, there was no evidence of impulse-buying tendency. These factors may have contributed to the low value of the coefficient for viral marketing. Observed variable $v1$ (BIG GIVEAWAY: "Like" . . .), which rewarded readers limited free access, was 0.65; variable $v4$ (0.66), which asked readers to "Like" within 89 min, required preadolescents to reflect their preference. These variables received higher weight by using Facebook tools to build ties between a reader and promoted content. Managing a library's Facebook community requires useful and interesting strategies for promotion. Preadolescents did not approve of creating a sense of urgency to grab resources; this indicates that Facebook communities created by libraries should be managed at a slow pace, gradually building connection points with readers over time.

Engagement via events and games

Gamification (0.97) is the use of game design in non-game contexts. [Raymer \(2011\)](#) and [Simões et al. \(2013\)](#) pointed out that it is in human nature to play and have fun and that using this can turn things that were originally boring or even displeasing into fun and engaging processes that promote learning. [Yang et al. \(2017\)](#) applied the technology acceptance model (TAM) to examine the impact of gamification on intention to engage and brand attitude. It seems perceived enjoyment has a strong impact on the intention to engage, which, in turn, influences brand attitude. Low value was associated with observed variable $g4$ (0.78), which offered participants a game to play once a reading assignment was completed, and the storyline is open to the playfulness. Two other variables ($g1$ (0.85), $g2$ (0.83)) used a "come-and-play" strategy and an emotional, fixed storyline to greater success. [Summers and Young \(2016\)](#) explain that not all gamification elements are equally successful in promoting brand engagement. Organizations should emphasize user self-expression, employing concepts such as trust, fantasy, challenges and curiosity, to help promote concepts specifically related to the organization's brand. Thus, libraries using gamification marketing in promotions should use fun presentations and games to get preadolescents more interested in reading.

The coefficient of event marketing was 0.91. [Getz \(2005\)](#) explained that event marketing is a process of using marketing mixes and creating value via clients and customers to achieve the organization's objective. A prerequisite is that the organization itself must be able to

maintain competitive advantages and orient its marketing toward building reciprocal relationships. Variable $e1$ (0.71) was the post: “Highly recommended by the admins! Sign up”; variable $e4$ (0.80) was the post: “Like a team game, sign up and get a gift.” Variables $e1$ and $e4$ used a related activity to attract readers. Observed variable $e2$ (0.88) arranged thematic events in a sequential order (describing the history of Children’s Day, offering a game for those who borrowed a book and then offering a free gift for those who borrowed more books). Variable $e3$ (0.87) was the post: “Children’s Day, come to an activity and get a gift.” These strategies were highly successful. [Lee et al. \(2012\)](#) explained that the main influence path is arousal – valence – perceived ease of use – perceived enjoyment – attitude toward using Facebook – intention to go to the event. For libraries to successfully apply event marketing, they must first stimulate preadolescents and recessively establish bonds. This induces a sense of ease of use and enjoyment, which helps establish the positive use of Facebook. By hosting relevant and stimulating events carefully designed to promote library resources, preadolescents will be prompted to engage with library resources and cultivate their literacy.

Preadolescent sharing and engagement with library posts

For young users, the SNS platform must be perceived as a trusted environment filled with friends; this creates the conditions for hedonic information seeking for this age group. We explored two approaches to stimulating preadolescents’ motivations to use library collections: utilitarian and hedonic. Both approaches proved useful. For the utilitarian approach, WOM received the highest weighting. For the hedonic approach, GM had the higher weighting. The weighting of GM was more than WOM. The weighting of hedonic EV was more than utilitarian BZ and VR. Thus, preadolescents seem to favor hedonic over utilitarian strategies.

[Tamilmani et al. \(2019\)](#) examined hedonic motivation related to the extended unified theory of acceptance and use of technology (UTAUT2). They suggested that hedonic motivation is an appropriate construct for consumer-executed tasks performed for the purposes of novelty and pleasure. However, in a survey of technology use for utilitarian purposes, it is not applicable. Rather than aiming for a dogged commitment to the original model, they recommended making necessary adaptations or omitting irrelevant constructs depending upon the context of the study in question. For example, in the context of retail behavior on Facebook, [Anderson et al. \(2014\)](#) investigated the relationships among hedonic and utilitarian motivations underlying retailer loyalty and purchase intention. They found that loyalty (trust) was influenced by the functions of experiential shopping (hedonic) and information access (utilitarian). Purchase intention was only influenced by time saving (utilitarian) and not influenced by bargain perceptions (hedonic).

In general, content posted on SNSs is not controlled. Hence, preadolescents are bombarded daily with huge amounts of data, some of which may be upsetting to them. Libraries represent an authority with a positive image, which increases the likelihood that young users will trust posts from libraries. Our results indicate that preadolescents not only accept hedonic GM and EV strategies but also accept information-oriented utilitarian WOM and BZ strategies. The VR strategy, which created time urgency, received the least acceptance, despite its offer of rewards. We demonstrated that a two-fold model combining both hedonic and utilitarian functions can effectively describe preadolescent acceptance of library promotion strategies.

Research limitations and suggestions for future research

This study was subject to certain limitations. We focused on preadolescents; future studies could consider widening the age range of participants to include younger and older children. Another useful direction for future research would be to expand the questionnaire design to

collect information on more media channels and their influence on trending subjects. As the libraries in Taiwan are positioned as public services and a means of balancing information among different social classes, the setting and influence of librarians' marketing motives are limited. Future investigations could explore the positioning of public libraries and the integration of different marketing strategies.

Conclusion

It has been suggested that librarians should employ appropriate marketing strategies based on readers' information-seeking behaviors and information literacy to promote their collections to the public. In this experiment, word of mouth had the highest weight (0.96) among sharing marketing strategies, followed by buzz marketing (0.89) and viral marketing (0.73). This indicates that trust and familiarity have the greatest effect on preadolescent choices when assessing information on SNS platforms. Hence, libraries should exploit credible posts as a way to increase individuals' recognition of its collections and encourage people to share WOM information within their group. Message diffusion occurs via the posting and re-posting of interesting topics. To create effective buzz, content must be richly visualized and relevant to preadolescents' daily life so that it can pull these young readers in. Creating a sense of urgency (viral marketing) seems to be an ineffective approach to engaging preadolescent users. Rather, gamification marketing (0.97) can successfully promote a library's collections. For gamification, it is important that positive emotions are experienced in the game-playing process to create positive brand awareness and recall to form the preferred attitude. Events are also effective at gaining readers' attention. In particular, when a thematic group of events are arranged in a step-by-step fashion, readers feel a sense of connection with the library. For young users in particular, the searching environment must be a trusted environment for information-seeking or hedonic behaviors to be successful. In our experiment, the preadolescent participants preferred hedonic (engagement) marketing strategies over utilitarian (sharing) approaches.

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