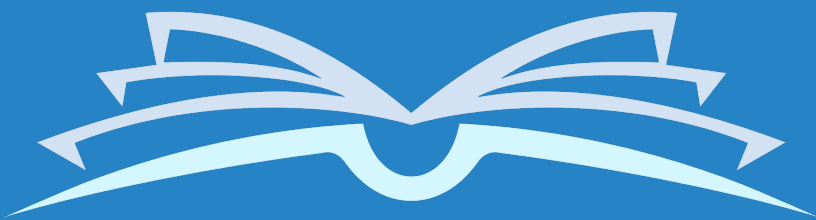


بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



*Medical Library  
&  
Information Sciences*

*Journal Club*

*Tir 13, 1401. 11:45- 13 PM*

**Title:**

**Comparison on effect mechanism of  
continuance usage between entertainment  
and knowledge apps: a qualitative analysis  
of online reviews**

***Presenter:***

***Z. Otroj***

# Comparison on effect mechanism of continuance usage between entertainment and knowledge apps: a qualitative analysis of online reviews

The image displays two overlapping screenshots of a journal article page. The left screenshot shows the article title and metadata on the 'Electronic Library' website. The right screenshot shows the article's abstract and citation information on the 'Web of Science' platform.

**Left Screenshot (Electronic Library):**

- Resource Finder / Scopus
- Document type: Article
- Source type: Journal
- ISSN: 02640473
- DOI: 10.1108/EL-07-2021-0140
- View more
- Article Title: Comparison on effect mechanism of continuance usage between entertainment and knowledge apps: a qualitative analysis of online reviews
- Journal: Electronic Library
- Volume: 40, Issue: 1-2, Pages: 38 - 62, February 2022
- Authors: Shang, Shanshan<sup>a</sup>; Du, Chenhui<sup>a</sup>; Wu, Jilan<sup>b</sup>
- Footnote <sup>a</sup>: School of Business and Management, Shanghai International Studies University, Shanghai, China
- Footnote <sup>b</sup>: School of Information Management and Engineering, Shanghai University of Finance and Economics, Shanghai, China and Zhejiang College, Shanghai University of Finance and Economics, Linhu, China

**Right Screenshot (Web of Science):**

- Web of Science™
- Search, Marked List, History, Saved Searches and Alerts
- Results for 10.1108/EL-07-2... > Comparison on effect mechanism of continuance usage between entertain...
- Export, Add To Marked List
- Full text at publisher
- Article Title: Comparison on effect mechanism of continuance usage between entertainment and knowledge apps: a qualitative analysis of online reviews
- By: Shang, SS (Shang, Shanshan) [1]; Du, CH (Du, Chenhui) [1]; Wu, JL (Wu, Jilan) [2], [3]
- ELECTRONIC LIBRARY
- Volume: 40 Issue: 1-2 Page: 38-62
- DOI: 10.1108/EL-07-2021-0140
- Published: FEB 1 2022
- Early Access: DEC 2021
- Indexed: 2021-12-12
- Document Type: Article
- Abstract: Purpose Continuance usage of mobile applications (apps) has attracted much attention from scholars and enterprises, while the extant research mainly focuses on continuance intention. The inner effect mechanism of the characteristics of apps is still unclear. Under the tenet of continuance usage behaviour, through analysis of characteristics derived from online reviews, this paper aims to establish an effective model and discloses the commonalities and differences between two mainstream apps, which are entertainment and knowledge apps, respectively, from 2018 to 2020. They then derive effect factors and establish the effect model using grounded theory. A deep comparison is then conducted. They analysed the similarities and differences in the general effect model, internal effect mechanism and detailed characteristics of the two types of apps. Findings Entertainment app and knowledge apps share the same general effect mechanism; that is, the effect chain of characteristics to perceived value then finally to continuance usage behaviour. However, obvious differences also exist in detailed and specific effects between the two apps. Originality/value The present research is among the first to have a deep analysis
- Citation Network: In Web of Science Core Collection, 0 Citations, Create citation alert
- 47 Cited References, View Related Records
- You may also like... Tan, WK; Lee, PW; Hsu, CW; Investigation of temporal dissociation and focused immersion as moderators of satisfaction-continuance intention relationship: Smartphone as an example, TELEMATICS AND INFORMATICS

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Title: Electronic Library, The

Publication Type: Journal

ISSN/ISBN: 0264-0473, 1758-616X

Indexed in: ISI, Scopus

Publisher/Holder: Emerald  
ProQuest (from 1998-6-1 vol 16 issue 3 to vol 34 issue 2)

Journal Metrics:

IF:	1.453		IF (5 year):	1.54	JCI:	0.56
Eigen Factor:			Immediacy:	0.306	Cited Halflife:	6.1
CiteScore:	2.6		SNIP:	1.038	SJR:	0.554

ISI Rankings:

Subject	Rank	Quartile	Percentile
Information Science & Library Scienc...	55/86	Q3	N/A

Scopus Rankings:

Subject	Rank	Quartile	Percentile
Library and Information Sciences	50/235	Q1	78%
Computer Science Applications	338/693	Q2	51%



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## Mobile Devices, Apps & Continuance Usage

- Widespread usage
- More than merely a communication tool
- Used anytime, anywhere
- Browse information
- Make transactions

Therefore, various mobile applications (apps) have been developed to meet users' diverse requirements, such as **apps for travel, health, payments and games**.

Apps are playing an increasingly large role in daily life and the flourishing of mobile apps has attracted the attention of **scholars and enterprises**.

Thus, the **topic of continuance usage is in the spotlight**.

Enterprises want to **keep customers using** their apps. Scholars want to unveil the mystery of the **reasons behind continuance usage**.

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## Levels of Popularity & Continuance Usage

Why do users feel that an app is useful? What characteristics of an app motivate users to keep using it? There are so many kinds of apps in the market. Some apps are quite popular, some are not. The **continuance usage** of an app determines its success.

### Analysing App Continuance Behavior:

- perceived usefulness
- expectancy
- Used anytime, anywhere
- social factors
- perceived value

### App as Information System:

- Technical function characteristics
- Characteristics of the content

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## Research Questions

- Q1.** What incentivizes people to use two of daily life's mainstream apps, entertainment apps and knowledge apps?
- Q2.** What are the detailed characteristics of entertainment and knowledge apps and what factors drive people to continue using them?
- Q3.** What are the similarities and differences between entertainment apps and knowledge apps within the scope of adoption and continuance usage?

## Study Aims

The present study aims to answer these questions through a deep analysis of user online reviews.



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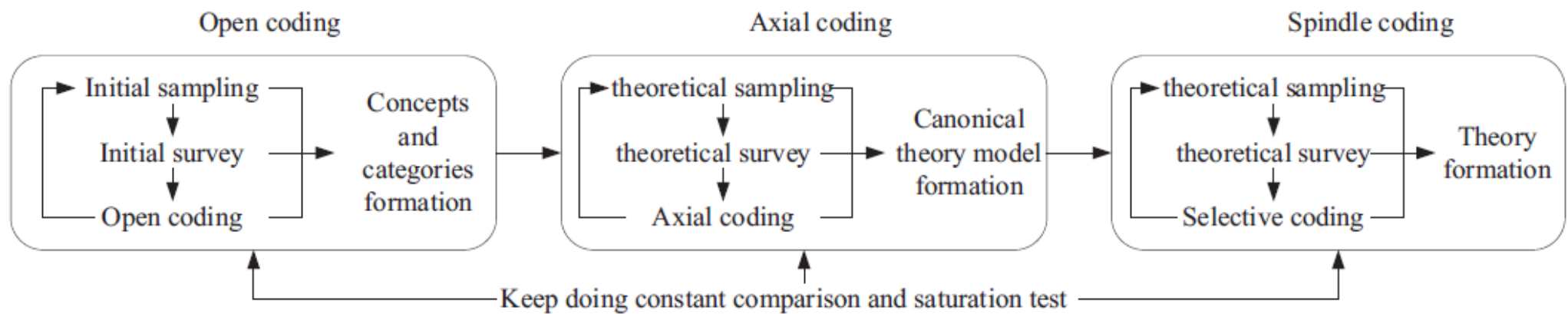
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## Method and Data Collection

### Grounded Theory

Grounded theory is a scientific method for mining rooted laws and rules, a qualitative approach to solving micro problems and is widely applied in the research fields of social science.

### Key Process of Grounded Theory:



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## Method and Data Collection

### TikTok & Zhihu

Online reviews of TikTok and Zhihu, representatives of entertainment apps and knowledge apps, respectively, with the largest numbers of users in China, were collected from an **app store**.

Given the **large volume** and the **more objective opinions**, nowadays, more and more scholars highlight the importance of **online reviews**.

By virtue of the **large user volume** of Apple mobile terminals, **reviews in the Apple App store**.

Hence, this paper also collected reviews of TikTok and Zhihu, with a time window **from 1 January 2018 to 31 October 2020** from the **Apple App store**, constrained to those reviews including the **words representing continuance usage**, such as “**keep use**”, “**use it every day**”, “**can’t do without**”, “**like**”, “**intoxicated**” and so forth.

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## Method and Data Collection

A set of 6,000 reviews each year (i.e. 18,000 in total) for each app were randomly selected.

In total, **3 professors** and **17 graduate students majoring in information management**, who are familiar with TikTok and Zhihu and have a good command of grounded theory, were invited to do the coding and saturation test. The coding and saturation test took three months.

For the **first round**, each teacher and student did all the coding and the saturation test by themselves, according to their own understanding.

Then, for the **second round**, all professors and students worked as a discussion group, discussing the factors and nominations again and again until the discussion group reached an agreement on all the factors, dimensions and relations.

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## Antecedent Analysis & Model Construction

Final dimensions were determined as:

- Technical characteristics;
- Content characteristics;
- Emotional value;
- Functional value;
- Social value;
- Flow.

Flow is the extent that users indulge themselves in the app and habit is always taken as a form of flow with a relatively low extent of indulgence.

**Flow is a common antecedent of continuance usage.**

It is found that although the two apps share the same dimensions, their specific factors or antecedents are prominently different.

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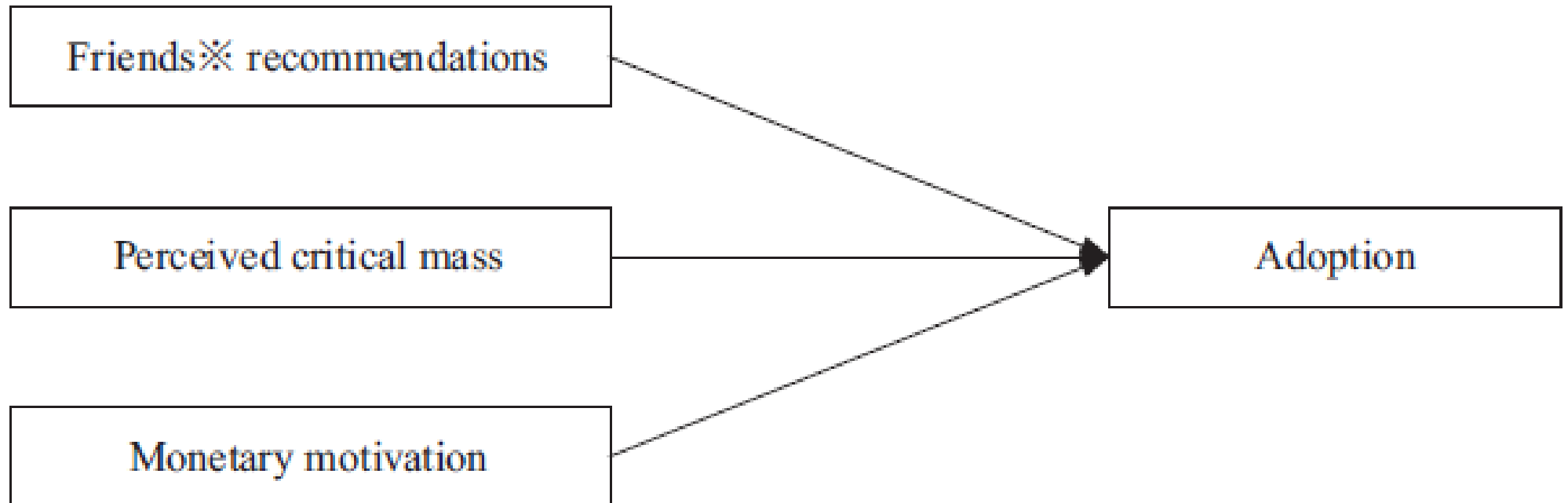
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## Antecedent Analysis & Model Construction

Effect model for the entertainment app

Adoption model for the entertainment app



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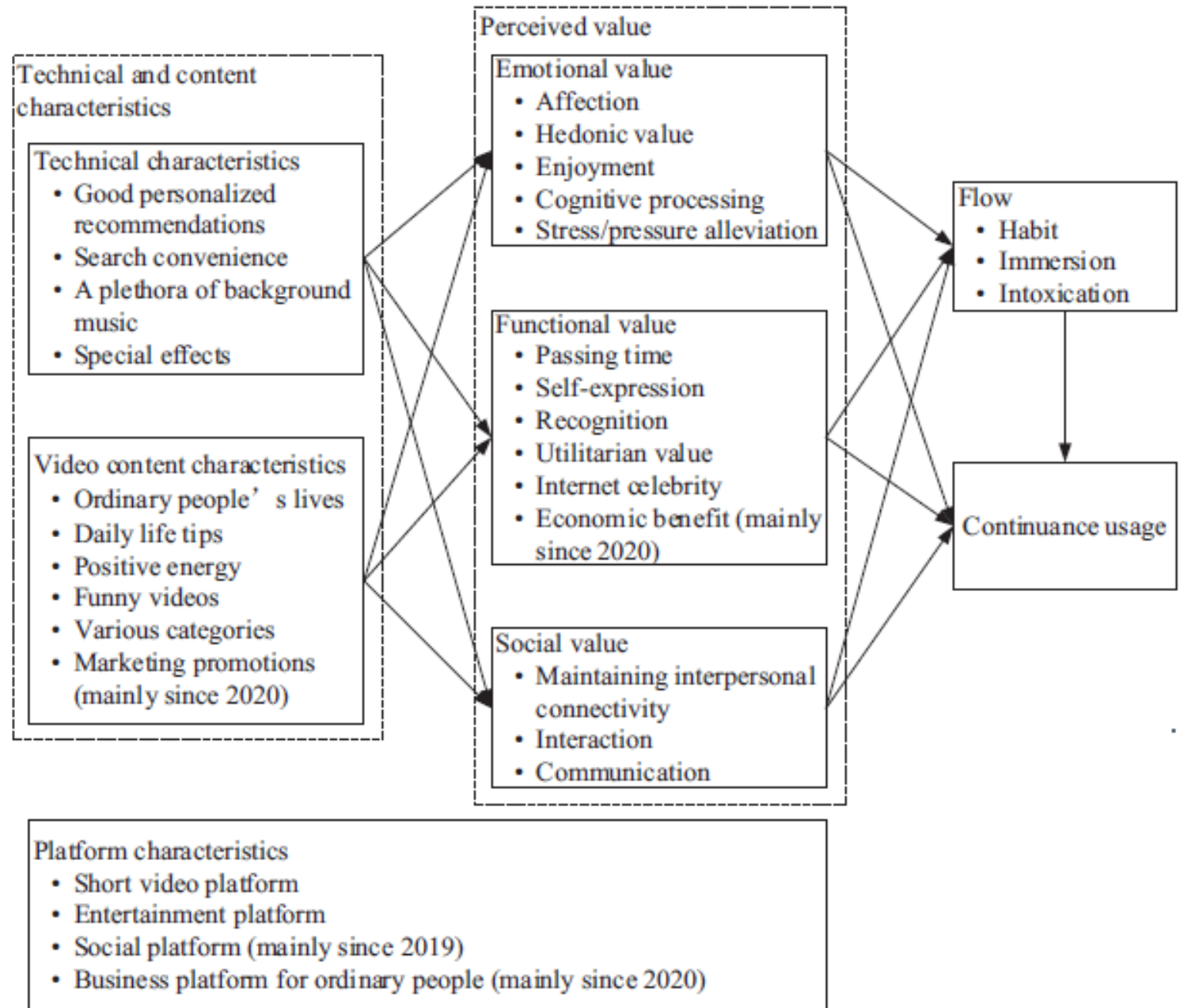
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# Antecedent Analysis & Model Construction

Effect model for the entertainment app

Continuance usage behavior model for the entertainment app



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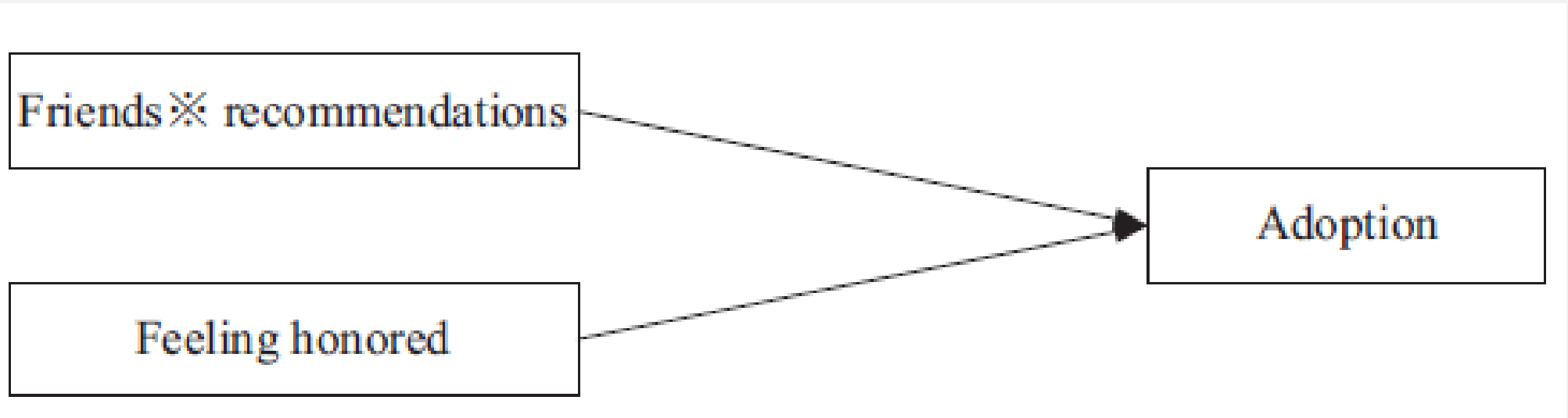
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## Antecedent Analysis & Model Construction

Effect model for the knowledge app

Adoption model for the knowledge app



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## Antecedent Analysis & Model Construction

Effect model for the  
knowledge app

Continuance usage  
behavior model for  
the knowledge app

### Technical and content characteristics

#### Technical characteristics

- Accurate search results
- Accurate recommendations
- Simple interface
- Ease of use on smartphone
- Recent views

#### Content characteristics

- Professional questions
- Professional and reliable answers
- Long, deep, and detailed explanations
- Sharp comments
- Issues of international concern
- Live professional lectures
- Wide range of books and learning materials

#### Platform characteristics

- Knowledge platform
- Professional Q&A community platform

### Perceived value

#### Functional value

- Get suggestions from experts
- Problem solving
- Increase knowledge
- Understand issues from multiple perspectives
- Reputation

#### Social value

- Self-congruity
- Communication with experts
- Group with elites

#### Flow

- Habit

Continuance  
usage



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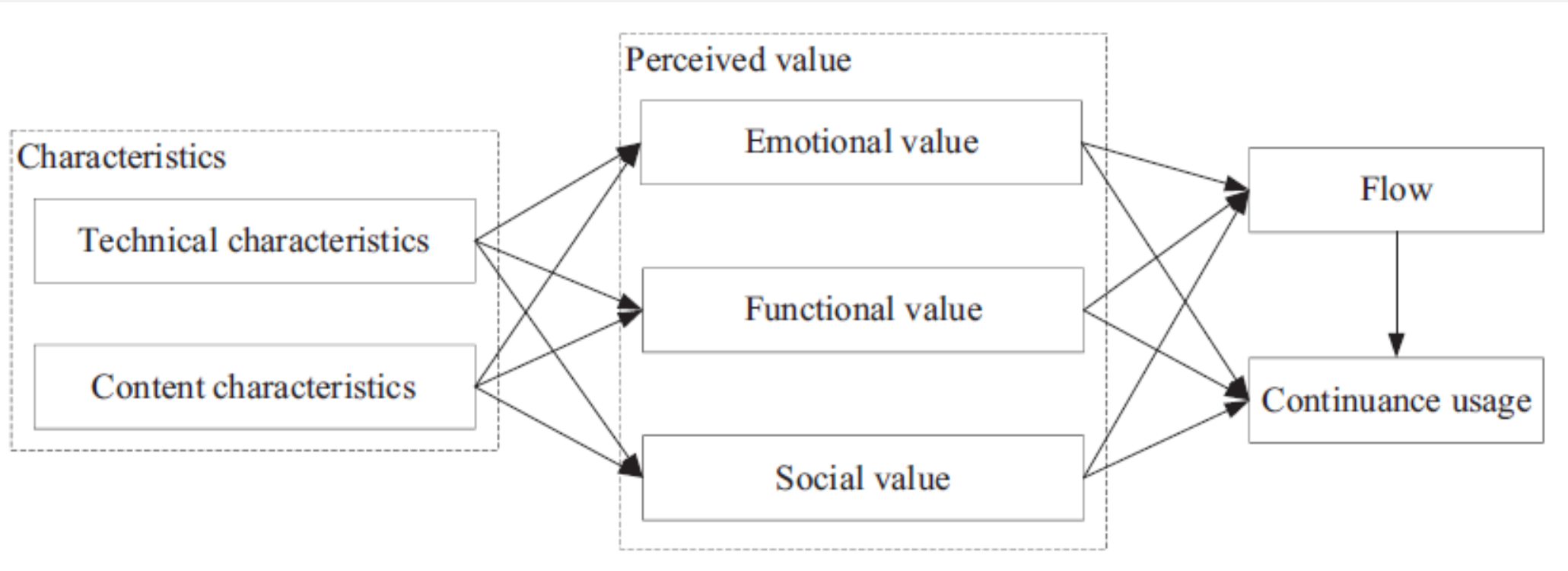
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## Comparison analysis

General effect model17





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## This paper makes three theoretical contributions.

**Firstly**, online consumer reviews play an important role in almost every market today and data in the present study are **online reviews**, which are more objective and more likely reflect people's experience with apps, compared with traditional questionnaire investigation.

**Secondly**, it is more difficult to study **continuance usage behavior** compared with **continuance usage intention**. Thus, prior studies mainly focus on intention. This paper explores continuance behavior by selecting the reviews that explicitly point out continuing usage and concludes that the effect chain moves in the following way: **characteristics** → **perceived value** → **continuance usage behavior**. Characteristics include **technical** and **content characteristics** and perceived value include **emotional**, **functional** and **social value**.

**Thirdly**, this paper is the first to discern the similarities and differences between entertainment apps and knowledge apps. This study carried out a deep and comprehensive comparative analysis of two apps and compared every aspect of the factors. This paper can help researchers better understand the two types of popular apps, revealing and illustrating the internal and substantial similarities and differences between them, further extending the extant literature in the information management system field.

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## Useful for App Managers

**Firstly**, overall, having a **large volume of diversified content** is important for an app or information system, so that anyone can find content in which they are interested.

**Secondly**, people tend to browse entertainment apps randomly, with no specific purpose and may unconsciously spend a lot of time on an app. Therefore, for the app, it is important to **stimulate the users' emotions**.

**Thirdly**, for knowledge apps, **high-quality questions and answers** are important. The key attribute of a knowledge app is its **professional content**.

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## Used to Enlighten Other Apps

Apps that are more of a professional nature, such as health apps, **should contain/provide professional, reliable and trustful content.**

Apps that have more of entertainment nature, such as game apps, should have content that **prompts users' emotional value and flow.**

For apps with entertainment and knowledge attributes, the owners should make an effort to measure and judge their apps so that the **entertainment and knowledge parts reach an appropriate and good balance.**

Nevertheless, every app should have **abundant and diversified content**, to cover every user's interests.

Additionally, the apps should have an **accurate search and recommendation system**, so that users can conveniently and easily find content in which they are interested.

In addition, app owners should try their best to increase their **number of users**, as the more users the better.

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## Limitations and conclusions

This study used the adoption **effect model** and **continuance usage behavior effect model** by using **grounded theory** on **online reviews**.

The study had **two limitations** and offers several opportunities for future research.

- **Firstly**, as data were **mainly from the Apple App Store** in China, further analysis on data from both the Apple App Store and Android App store and from various countries and districts would provide further insight.
- **Secondly**, although online reviews enjoy the advantage of providing a large enough volume and objectivity, **the comments are by ordinary users, not experts** and some complicated inner factors may not be represented.

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- Journal quality
- Paper quality
  - Abstract & Keywords
  - Method
  - Data
- Was the paper clearly written?
- Most interesting aspect of the paper
- Most important result of the discussed paper

**THANK YOU**

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**ATTENTION**