



Research on when the users face the intelligent recommended content, whether they generate "like" behaviours in the social media environment

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Abstract. The purpose is to discuss whether users will like their intelligent recommended content and influence the liking behaviour in the social media environment to provide a reference for future research and practice. Using the Theory of Reasoned Action, the subjects investigated were interviewed to analyze the study, comb and conclude. In addition to the user's attitude towards "like" behaviour and the people around will stimulate users' "like" behaviour, intelligent recommend information content quality, service quality, the quality of the system and the user's own needs, platform operation, and social influence will also directly affect the "like" intention, liking intention also directly affect the "like" behaviour.

Keywords: social media; intelligent recommendations; like behaviour; user behavior; The theory of Reasoned Action

1 Introduction

With the rapid development of the Internet, various social media are filled with complex information data; users are always facing the challenge of information overload [1] and cognitive load [2]. In response to this phenomenon, the development of related technologies in the era of smart media to alleviate this problem; unlike traditional media, smart media is based on the collection of big data algorithms and processing of a form of intelligent media, according to the user's demand for specific personalised services It is a new media approach based on artificial intelligence, which avoids the need for users to filter out some of the wrong information by themselves. Because of the characteristics of intelligent media, we browse the major social media, in addition to our initiative to retrieve the relevant information, which is a large part of the recommended content from the big data algorithms under the intelligent media, which is mostly based on the user's preferences and personality and other data to form a piece of special personality information, to cater better to meet the needs of the user, accept the user's interest in the content. Still, there are relevant scholars who provide specific personalised services. However, some scholars have shown that intelligent recom-

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mentations help us but also bring a series of problems, which will bring corresponding problems to users and differences in attitude towards recommended content, such as causing users to gradually become passive from actively obtaining information [3]; the excessive popularity of artificial intelligence media will lead to the invasion of some of the user's privacy, and the repetition of a large number of similar content pushed instead of the reverse. Against this background, it makes sense to explore what kind of interaction behaviours users will have with the intelligently recommended content.

After Fishbein [4] et al. established the prototype of the Theory of Reasoned Action (TRA) 1967 when they studied attitudes, in 1975, they and Ajzen [4] further researched and modified the model, perfected the previous model and finally established the theoretical model of Reasoned Action (TRA). The theory of Reasoned Action (TRA), also known as the TRA theory, holds that an individual's willingness to behave towards something will be influenced by both their attitude towards the matter and his or her subjective norms, which will ultimately affect the individual's specific behaviours. Due to the emergence of the theory, relevant scholars have already applied this to the study of information content. Still, few people have used this to the range recommended by A.I. algorithms. Therefore, this study aims to explore whether users' attitudes towards pushed content in the era of intelligent algorithms will affect their own interactive behaviour, which can help to satisfy users' needs better and, at the same time, have constructive significance for this significant data algorithmic recommendation technique.

In summary, this paper will specifically explore whether users' attitudes towards pushed content in the era of intelligent media influence them to make likes, analyse their influencing factors and influencing mechanisms, and then construct a relevant model based on the Theory of Rational Behaviour (TRA) to find out the logical significance behind it, to provide references for future research and practice.

2 Literature Review

After receiving information on social media, users will make corresponding interactive behaviours, including liking, commenting, retweeting the data, etc. Based on the research results of the previous researchers, most of them focus on the traditional interactive behaviours, ignoring whether the user's liking or disliking of the source of the information pushed will affect the interactive behaviours, and the "liking", as an essential and common social media interactive behaviour, will be a significant factor in the interaction between users. As a basic and everyday social media interaction function, "liking" is easy to operate, has a higher frequency than commenting or retweeting, and is more able to reflect the user's acceptance of content recommended by intelligent algorithms.

Theory of Reasoned Action (TRA) [5], also known as TRA theory, originated in the field of social psychology and is used to study the relationship between people's attitudes and their behaviours. TRA theory focuses on forming attitudes and subjective norms and believes that human behaviours are rational and that any factor may influence attitudes and subjective norms and thus impact behaviours. According to the

Theory of Reasoned Behaviour model, it is divided into (1) Attitude refers to the emotions, including positive and negative emotions, that an individual holds towards a particular behaviour or thing, which is the individual's subjective perception of the outcome of the behaviour and the value judgement of the development. (2) Subjective norms refer to a group of individuals to produce a sense of group pressure; individuals in the implementation of a particular behaviour will be affected by the group, will take into account the group's evaluation of this behaviour and affect the implementation of their behaviour. (3) Behavioural intention refers to the individual's tendency to treat or deal with objective things, a subjective behavioural judgement. Specifically as Figure 1:

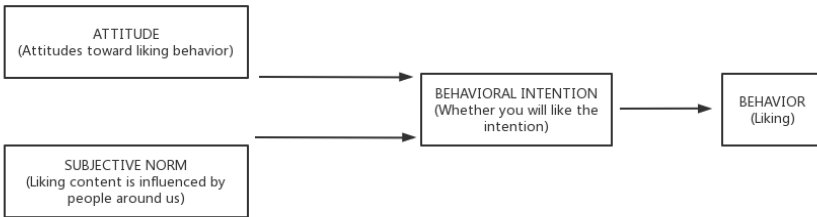


Fig. 1. Theory of Reasoned Action

After more than 40 years of development, TRA theory has received extensive attention from many scholars. It applies to individual behavioural prediction models, including social psychology [6], marketing [7], decision science [8], and information systems use[9]. Therefore, adopting this theoretical model can better carry out a profound study on whether users will like their push content in the era of smart media. Based on this, this paper adopts the theory of rational behaviour, which can be deeply discussed and researched.

3 Research design and methodology

The Theory of Rational Behaviour (TRA) is based on the principle of predicting and understanding the causes of behaviour.

The underlying logic is that individual attitudes and subjective norms impact behaviour. Based on the understanding of the TRA model and its applicability, and in conjunction with the intelligent media era and its algorithmic recommendation of content, this study will use the Theory of Reasoned Behaviour (TRA) model to make research hypotheses and construct a research model to verify whether or not users will like the recommended content.

Given the varying degrees of understanding of the research topic among the interviewees, the data collection in this paper is carried out using the interview method. In this paper, through the preliminary literature research and drawing on related research experience, the initial design of the interview outline, and finally, through data collec-

tion and other means, feedback from different users' perspectives and the corrections, and determine the formal interview outline, as Table 1:

Table 1. Interview Outline

Interview topic	Interview content
Introduction	This interview has no right or wrong answer, and please answer truthfully according to your experience and thoughts. The interview content is only used for academic research; we will abide by the confidentiality rules and are willing to take the corresponding legal responsibility.
Interviewee Information	Mainly college students; gender, age, discipline, major, years of Internet use
Core Questions	<p>Are you aware of intelligent recommendation? What kind of social media smart recommendation content have you come across? Please give examples.</p> <p>Have you ever liked the content of intelligent recommendations on social media? If yes, please give details.</p> <p>What aspects of social media intelligence recommendation content can meet your needs, and what aspects cannot?</p> <p>Are you satisfied with the content intelligently recommended by social media? Please describe in detail what you are satisfied with, what you are not satisfied with, and the reasons for your dissatisfaction.</p> <p>What factors do you consider when liking the intelligently recommended content in social media? What factors may motivate or interfere with your liking?</p> <p>Have you ever encountered any situation where you wanted to like something but did not do so in the end or any other situation where you had a nagging recurring problem? Please describe in detail.</p>

4 Empirical analysis

Finally, based on the interviews and research, as well as the later collation and discussion, the following initial conclusions were drawn, as Table 2:

Table 2. Interview Results

Original statement	Initial conclusion
Z: If the content they push is more understandable and exciting, or if he has done a better job on that page, I might also be willing to give it a like.	The intention to like will be generated because the recommended content is quality.
L: Because if all the contents are similar, if there is one with a lot of likes, then I may pay attention to it and like it more.	Users will like a recommendation because many people have liked it.
N: I'll like it because it's good, but it's not hot, and it's evident that the blogger spent a lot of time on it, but it only has a few likes, so I'll like it.	Users would like it because the content is good and has quality.
Y: Will liking the post make others misunderstand what kind of	Users worry about the impression

<p>person I am, especially on some social issues or some public opinion events? Will liking the post make others misunderstand? I will think about it.</p> <p>W: Because there are platforms where likes can be displayed, I think it will show my taste, and at the same time, I am also interested in.</p> <p>N: Sometimes, the platform may steal or manipulate the likes, and I will cancel them when I see them.</p> <p>L: Because the intelligent recommendation of social media nowadays is powerful, and it can get what I'm interested in and recommend things that are more to my liking. I will like what I'm interested in.</p> <p>H: Take Xiaohongshu as an example. I'm preparing for an exam recently because I always search for it, and then it will recommend some exam-related content or tips, so I'm willing to like it!</p> <p>Y: Sometimes, I find that not everyone agrees with you, and some people may even hit you back. For example, sometimes I like a post on a social media platform, and I agree with it, but then I find out that it's been attacked by many people, and I want to unlike it, worrying that people may misunderstand me or something.</p> <p>Z: Sometimes there are some incentives on some platforms; that is, if you like the platform, it will give you some points or some activities, so I will also like the platform for that.</p>	<p>of people around me and considering whether to like the post.</p> <p>Users would like to like the platform because it shows me better.</p> <p>If users don't like the post because of themselves, they will cancel it.</p> <p>Users will like the content because it fits their ideas and is attractive.</p> <p>Users want to give it a like because the recommended content can help them with some value.</p> <p>Users want to cancel their likes because they are worried that people around them will misunderstand them and they will be pressured by public opinion.</p> <p>Users will like it because of the gamification mode of operation.</p>
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5 Conclusion and Discussion

The study results show that attitudes and subjective norms significantly and positively affect the behavioural intention to like, and the empirical analysis results coincide with the TRA model's hypotheses. This means that when users' attitudes towards liking pushed content are positive, i.e., when they approve of the interaction behaviour of liking, it will drive their intention to like. Users will be willing to continue to like on social platforms, and the attitudes of people around them will stimulate their intention to like. The decision to like is a complex process when "people" who are important to users think that their pushed content is important, the decision to like is a complex process, and when "people users believe that their driven content is important, they will be willing to continue to like. When the "people" who are important to the user think that their push content is worth liking, the more likely the user is to like it.

Based on this theory, it is not difficult to find that other factors will also affect whether the user will like the pushed content: (1) the quality of the intelligent recommended information content, including the accuracy, novelty, completeness, and form of its presentation; the quality of the intelligent recommended services, including the timeliness of the platform recommendations, controllability, and personalised services; and the quality of the platform of the intelligent recommended system, such as the

security and privacy protection, etc.(2) users' own needs, including entertainment needs, social needs, emotional needs, functional needs, expression needs, etc. users' satisfaction with the recommended content; (3) the novelty of the platform's gamification operation or other operation methods, and the social impact, including pressure conflicts, other people's evaluations, and group norms. (4) The behavioural intention of liking itself affects the final liking behaviour.

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