



# Disaffordances or affordances: Perceptions of ChatGPT in the workplace

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## ABSTRACT

People increasingly use generative AI like ChatGPT in the workplace since ChatGPT was launched in late 2022. There could be negative consequences of ChatGPT use like threatening employees' job and misuse due to less updated knowledge. The limitation of updating its knowledge, accuracy and authenticity may also be other reasons of hindering the use of ChatGPT in the workplace. This study aims to examine how the positive or negative perceptions of ChatGPT among employees affect the attitudes towards using ChatGPT. This research fills the gap by finding out the negative perceptions of using ChatGPT. The Self-Determination Theory (SDT) is selected as the foundation of explanation of generative AI adoption in general. A survey research was conducted in 2024 to collect views of working adults towards ChatGPT in Hong Kong. The findings showed that automatability, personalization and availability of ChatGPT are positively associated with ChatGPT effectiveness. Limited understanding and null decision-making are positively related to discomfort with using ChatGPT. The association between lack of emotion and discomfort with using ChatGPT, however, is not supported in this research. ChatGPT effectiveness is found positively associated with the attitudes towards ChatGPT. SDT was further validated to demonstrate the importance of fulfilling employees' psychological needs for more motivated use of ChatGPT. Corporations should count on the three features affecting ChatGPT effectiveness which are automatability, personalization and availability. Future research might explore the influence of demographical factors of employees such as age, work position, educational level, income as well as the contextual factor such as industry type.

## 1. Introduction

ChatGPT is an AI-powered chatbot launched by OpenAI in late 2022 [1], people increasingly use generative AI like ChatGPT in the workplace. ChatGPT users reached around 1 million for both businesses and consumers worldwide [2]. ChatGPT has also been exploited in various sectors such as customer service, marketing, tourism, medical services, legal, media and academia [2]. ChatGPT is an AI-powered chatbot that can be utilized as a digital assistant to answer questions, provide explanations or generate reports [3]. By search function and generation of human-like text responses, efficient management of manpower and time is enhanced [4]. However, there could be negative consequences on ChatGPT use like threatening employees' jobs in fields such as customer services, content creation and knowledge integration. The limitation of updating its knowledge, accuracy and authenticity may also be other reasons of hindering the use of ChatGPT in the workplace. In order to facilitate the adoption and implementation of ChatGPT in the workplace for enhancing productivity and efficiency of employees, perceptions and

attitudes towards using ChatGPT in their workplace should be investigated among employees. Thus, we could have a sustainable workplace with aid of Generative AI technology. What are the negative concerns of the employees in using ChatGPT? This study aims to examine how the positive and negative perceptions of ChatGPT among employees affect the attitudes towards using ChatGPT.

Employees who feel positive about ChatGPT would tend to be positive about adopting ChatGPT in the workplace [5]. By connecting the features of ChatGPT to improvement of employees' perceptions, companies might consider specialization of ChatGPT regarding its particular features for implementation of ChatGPT [6]. These selected features can increase employees' acceptance of ChatGPT. Further, companies can develop a more informed strategy for ChatGPT incorporation for maximizing the benefits of using ChatGPT and addressing possible negative concerns. Therefore, this study would provide recommendations to companies for positive perceptions and attitudes towards ChatGPT in the workplace among employees.

Previous research on ChatGPT often focused on ethical and

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technological implications related to learning [7]. Pratiwie [8] focused on the positive determinants of ChatGPT use while conducting a phenomenological study of workers on the use of ChatGPT. By interviewing three informants who used ChatGPT in their workplace, it is found that ChatGPT helps complete work tasks, provides personalised responses to user prompts and swift feedback for work requests despite its limitation of updating knowledge [8]. This research fills the gap by finding out the negative perceptions of using ChatGPT. Moreover, this research examines the perceptions towards ChatGPT from the employees' perspective in the workplace context which is not the current trending ChatGPT research which emphasizes educational setting including research by Foughi et al. [3], Strzelecki [9] and Zhou and Li [10]. With ChatGPT becoming popular in the present times, this research is of great importance to provide managerial implications for future development of ChatGPT in the workplace.

The contribution of this research derives from both academic and practical perspectives. By applying the concepts of technology affordances (i.e., automatability, personalization and availability), this study explains ChatGPT features in more in-depth manner. The three types of disaffordances (i.e., limited understanding, lack of emotion and null decision-making) are also examined to enhance our knowledge and understanding about the issues of adopting ChatGPT. Hence, both positive and negative perceptions towards ChatGPT could be uncovered. For investigating the attitudes towards using ChatGPT in the workplace, ChatGPT effectiveness and employees' discomfort with using ChatGPT would be essential. In the meantime, identifying key technological features of ChatGPT would be first step of informed strategy to help the companies train employees effectively for enhanced productivity and efficiency in the workplace.

In this research, we explore employees' perception in two angles, i.e., perceived effectiveness of ChatGPT and discomfort with using ChatGPT [6,11]. Theoretically, affordances are used to develop the technological features of ChatGPT while disaffordances are used to recognise the issues of using ChatGPT. Our research objectives are: (1) to identify how ChatGPT features in particular would influence the perceived effectiveness of ChatGPT and discomfort with using ChatGPT; (2) to examine the employees' positive and negative perceptions of ChatGPT; and (3) to explain how the attitudes towards ChatGPT could be influenced by the employees' positive perceptions (i.e., affordances) and the negative perceptions (i.e., disaffordances) of ChatGPT.

The study is organised as follows. First, the introduction section presents the background, problem statement, research objectives and the significance of conducting this research. Next, the review of literature discussing ChatGPT, the formation of the hypotheses and the proposed research framework are provided. These sections are followed by the methodology describing the data collection and the questionnaire compilation. Then, results are presented and discussed. The conclusion and contribution of the study is suggested in the last section.

## 2. Literature review

One of the research areas on ChatGPT is prompt engineering. The design and format of prompts could affect the responses and performance of chatbots [12]. Another area of the research is to examine user attitudes and behavior related to generative AI. The behavior among students using ChatGPT is determined by their habit, performance expectancy and hedonic motivation [9]. The motivation of the use of ChatGPT among employees are different from students. Students might consider rules and regulation of their institutions [3]. On the other hand, employees use ChatGPT because of the powerful searching capacity and instant feedback so as to reduce their workload, enhance their productivity and efficiency [4].

Within these 2 years since the development of ChatGPT, early research often sheds light on the benefits and challenges of ChatGPT adoption in the education context. Apart from Pratiwie [8] who studied workers regarding their use of ChatGPT, there are limited articles

focusing on user's attitudes towards ChatGPT in similar context. Other research employed the extended unified theory of acceptance and use of technology model to examine the intention to use ChatGPT in educational context such as Foughi et al. [3] and Strzelecki [9].

## 3. Self-determination theory

Self-determination Theory (SDT) is a psychological theory proposed by Deci and Ryan [13] which posits three basic psychological needs of human including autonomy, competence and relatedness [10]. SDT is selected as the theoretical base for explaining why people are using generative AI. SDT is a "macro-theory of human motivation and wellness that focuses largely on how environments support or thwart people's basic psychological needs for autonomy, competence and relatedness." ([14], p. 670). When people's psychological needs are satisfied, SDT forecasts that increased motivation, performance and well-being would be exhibited [14]. Autonomy is considered as a self-initiated and selective behavior, competence refers to the feeling of effectively performing tasks with confidence and relatedness is defined as the emotional support a person receive or provide to other people during interaction [10]. With individuals' needs for autonomy, competence and relatedness satisfied, they feel content and intrinsically motivated instead of externally by rewards and punishments. Eventually, they would be more motivated in learning, working or engaging in other activities [10]. Therefore, this theory portrays how employees have higher motivation to use ChatGPT under the condition of their psychological needs being satisfied. There is a pressure in the workplace. Employees are advised to have internally and externally motivated. They then tend to exercise their intelligence to solve their problems. ChatGPT is one of their tools in the workplace.

## 4. Affordance and disaffordance

This paper draws upon the concept of affordance to enhance the understanding of the role of ChatGPT in the workplace. This concept as the most appropriate perspective was included to enhance the understanding of the role of modern technology in various contexts [6].

Affordance is rooted in ecological psychology and further utilized in education (e.g. [15]), engineering (e.g. [16]), hospitality [17] as well as human-computer interaction (e.g. [18]). Gibson [[19], p. 127] proposed that "The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill". Affordance theory has been used as a theoretical lens to offer insights on IT-enabled social change through the connection between an IT artifact and its users [20]. The assumption of affordance theory is that affordances are not fundamental to a specific environment but exist between actors and the environment [21]. The concept of affordance has been used to understand the role of technology in various contexts [22]. The term 'technology affordance' is therefore considered as a "generative mechanism" which focuses on the process of affordance actualization which stresses on the users' goals and the way users interact with the technology to achieve goals [23]. Technological affordance is "technology capability to do some actions" ([24], p.9), when individuals perceive how the features of the technologies can help achieve their goals [22]. It infers that goal-oriented actors (e.g., employees) interpret and learn about certain mechanisms (e.g., ChatGPT) regarding its possibilities for achieving certain tasks (i.e., affordance) and supporting their goals (e.g., generation of a report). Technological affordance can also facilitate the understanding of how ChatGPT can be used for improving productivity and efficiency of the companies. According to the literature on technological affordance and ChatGPT, three types of ChatGPT affordance comprising automatability, personalization, and availability are proposed in this study. In other words, generative AI's responsiveness, adaption and flexibility are explored.

#### 4.1. Automatability

ChatGPT can learn patterns and generate human-like responses to the enquiry possibly without any intervention of employees. Meanwhile, it can also be trained and deployed to provide reliable responses with consistent style to the routine enquiries. Therefore, ChatGPT can be considered as automatable. This variable refers to the extent to which employees believe that ChatGPT offers to respond automatically [25]. In this regard, automatability would influence its effectiveness. Therefore, hypothesis 1 is proposed as follows:

H1: Automatability of ChatGPT is positively associated with ChatGPT effectiveness.

#### 4.2. Personalisation

ChatGPT can provide different responses and suggestions based on individual's background, interests and preferences rather than providing universal responses to all users. It also provides distinct answers to different users. This variable refers to the extent to which employees believe that ChatGPT offers to provide responses tailored to users [5]. ChatGPT users opting for responses in diversity should also have impacts on the effectiveness of ChatGPT. Therefore, hypothesis 2 is proposed as below:

H2: Personalization is positively associated with the effectiveness of ChatGPT.

#### 4.3. Availability

Similar to other technology adoption, the powerful cloud computing infrastructure of ChatGPT allows around-the-clock services. Access to ChatGPT has no geographical restriction. The instant availability favours its quick penetration to every part of the world. This is also one of the reasons why people use ChatGPT. Therefore, this variable refers to the extent to which employees believe that ChatGPT offers to provide customer services without time constraints [5]. As the availability of ChatGPT influences the effectiveness of ChatGPT, hypothesis 3 is suggested as below:

H3: The availability of ChatGPT is positively associated with the effectiveness of ChatGPT.

On the contrary, disaffordance means lack of technological affordance. In this way, ChatGPT cannot help people reach their desired outcomes [6]. It refers to the technological failure to expedite certain goals of employees in our study [26]. Poor affordance refers to limited understanding, lack of emotion and null decision making. When ChatGPT cannot understand a brand new scenario, the disaffordance derived from limited understanding will be emerged. Without the most updated knowledge, ChatGPT relies on rational reasoning and its information providers [6]. In this research, three types of ChatGPT disaffordances including limited understanding, lack of emotion and null decision-making leading to discomfort with using it are suggested.

#### 4.4. Limited understanding

The foundation of ChatGPT's knowledge limits at information up to a certain date. As the development of this model is still at the beginning stage, its ability to engage in deep and contextual reasoning would be limited. ChatGPT requires regular training by using new data. Moreover, ChatGPT can only provide responses owing to its learned language patterns and text-generation capabilities. This limited understanding may cause some users' discomfort with using it. Therefore, this variable refers to the extent to which employees believe that ChatGPT does not offer to understand new questions from users [25,27]. Our hypothesis 4 is developed as follows:

H4: Limited understanding is positively related to discomfort with using ChatGPT.

#### 4.5. Lack of emotion

ChatGPT is just an artificial intelligence system which is not a human being. ChatGPT has no emotions at all. This variable refers to the extent to which employees believe that ChatGPT does not offer to express emotions during interactions with users [27]. While emotion can build trust in a relationship because of the interpersonal connection [28], without the connection, it is difficult to build trustful relationship and feel comfort with using it. Therefore, hypothesis 5 is proposed as follows:

H5: The lack of emotion is positively related to discomfort with using ChatGPT.

#### 4.6. Null decision-making

Currently, ChatGPT is not designed to make decisions for human. It can provide and analyze information, or even make suggestions for the users. However, its decision-making power is still deficient. This variable refers to the extent to which employees believe that ChatGPT does not offer to make decisions [27]. Employees might feel that they must get involved in decision-making which levels down the contributions by ChatGPT. One might consider other external factors and various stakeholders situation in order to make final decision. If there is something wrong with ChatGPT's decision, responsibility is also one of the issue. The null decision-making ability of ChatGPT may lead to discomfort with using it. Therefore, hypothesis 6 is proposed as follows:

H6: Null decision-making is positively related to discomfort with using ChatGPT.

### 5. Employees' perceptions towards chatgpt

Understanding employees' perceptions towards ChatGPT is essential for predicting their attitudes towards using ChatGPT. Nevertheless, people's perceptions of a technology relate to two variables which are the effectiveness of a technology (i.e., ChatGPT) and discomfort with using the technology [11]. Effectiveness of ChatGPT is considered as a cognitive factor which measures individual beliefs about the competency of ChatGPT. The discomfort with using ChatGPT is considered as an affective factor which measures individual and subjective feeling of discomfort. Employees may avoid using ChatGPT if they feel discomfort while using it [6]. The approach suggested by Castelo et al. [11] is adapted to this study for covering both cognitive and affective factors of individuals.

Lin et al. [6] proposes that the effectiveness of a technology relates to the employees' positive cognitive perceptions towards the technology and measures the extent in which the technology is competent to serve the purpose. On the other hand, the discomfort with using ChatGPT is the employees' negative affective perceptions [6] which may hinder their acceptance of this technology.

### 6. Attitudes towards chatgpt

Attitudes are defined as the individual's overall affective and subjective feelings towards a behavior which can be either favourable or unfavourable [29]. Lin et al. [6] suggests that the favourable attitudes towards a technology could be formed by perceiving higher level of effectiveness of the technology. If employees perceived higher effectiveness of ChatGPT, they would favour the use of ChatGPT more in their workplace. Therefore, hypothesis 7 is proposed as follows:

H7: ChatGPT effectiveness is positively associated with the attitudes towards ChatGPT.

On the contrary, due to employees' discomfort with using ChatGPT, they may hesitate to adopt ChatGPT in their workplace [11]. In other words, when individual feels uncomfortable with using ChatGPT, the individual may feel confused and refused to use it again. Therefore, we propose that the discomfort with using ChatGPT may relate to a

formation of a negative attitudes towards ChatGPT. Hypothesis 8 is proposed as follows:

H8: Discomfort with using ChatGPT is negatively associated with attitudes towards ChatGPT.

6.1. Proposed research framework

Based on Castelo et al. [11] and Lin et al. [6], we believe that employees' attitudes towards ChatGPT could be influenced by employees' positive and negative perceptions towards ChatGPT; and meanwhile, be represented by the ChatGPT effectiveness and discomfort with using it. Furthermore, the three ChatGPT affordances including automatability, personalization and availability and the three ChatGPT disaffordances including limited understanding, lack of emotion and null decision-making are associated with ChatGPT effectiveness and discomfort with using ChatGPT respectively. Therefore, our research framework is proposed below as Fig. 1.

7. Methodology

A convenience survey sampling was conducted in August 2024 to collect opinions of working adults in Hong Kong. Respondents were provided with detail information about the project and written consent was obtained from all respondents. The whole data collection was anonymous and participation was voluntary. The survey went through the ethical approval process by research committee of College of Professional and Continuing Education in July 2024 prior the data collection process (RC/ETH/H/260). Measurement items are all from established scales by Castelo et al. [11] and Klobas et al. [30]. The adapted scale was used by Lin et al. [6]. Face and content validity of items were checked by two seasoned researchers. One of the items of

discomfort is 'Using chatbots to interact with customers makes me uncomfortable,' one of the items of effectiveness is 'I can see the benefits in chatbots that can deal with customers' requests better than humans.' Our respondents are full-time employees who are working in financial, construction, professional services, tourism and retailing industries of Hong Kong (Table 1). Their working experiences range from 1 to over 10 years. Most of them are at entry, supervisory and middle management levels. After data cleaning, there are 113 valid responses. Partial least squares structural model was used for our data analysis due to the sample size requirement. The maximum number of arrows pointing a contrast is three with 5 % level of significant level. The minimum R-squared is 10 % and the recommended sample size is 103 [31]. Our sample in the study satisfied the requirement.

8. Results

Measurement model results are presented. All constructs' reliabilities are acceptable compared to recommended thresholds (Table 2). Discriminant validity is good because all the numbers are smaller than 0.85 threshold [31] (Table 3). Since values of independent variables and dependent variables come from same respondent, common method bias is needed to address. All the VIF values in the inner model are <3.3 in a full collinearity test. Our model is free from the bias [32].

Eight out of ten hypotheses are found supported. Automatability, personalization and availability of ChatGPT are positively associated with ChatGPT effectiveness respectively (H1, H2 & H3). Limited understanding and null decision-making are positively related to discomfort with using ChatGPT (H4 & H6). Lack of emotion is associated with discomfort with using ChatGPT (H5) which is not supported by the dataset. ChatGPT effectiveness is found positively associated with the

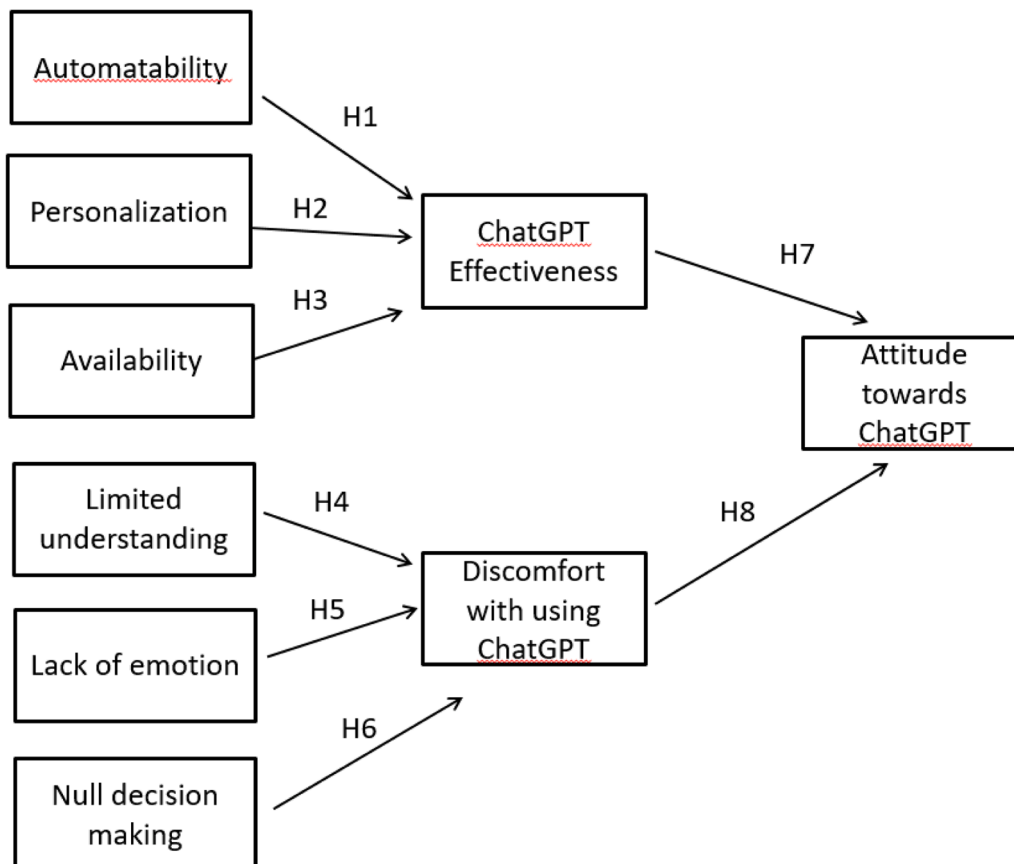


Fig. 1. Proposed Research Framework.

**Table 1**  
Demographics of respondents.

Category	Frequency	(%)
Gender		
Male	66	58
Female	47	42
Age		
18-30 years old	54	48
31-40 years old	33	29
41-50 years old	16	14
51-60 years old	9	8
61 years old or above	1	1
Company size		
Less than 5 persons employed	3	3
5-20 persons employed	8	7
21-50 persons employed	13	12
51-100 persons employed	18	16
Above 100 persons employed	65	58
NA	6	5
Industry		
Financial services	9	8
Civil service	6	5
Retailing and customer service	10	9
Trading and logistics	15	13
Professional, educational, medical services	44	39
Cultural and creative services	2	2
Others	26	23
Tenue with the company		
Less than 6 months	12	11
6 months to less than 2 years	28	25
2 years to less than 5 years	41	36
5 years to less than 10 years	19	17
10 years or above	10	9
NA	3	3
Job level		
Entry level	52	46
Supervisory management level	31	28
Middle management level	15	13
Senior management level	5	4
Director level	0	0
NA	9	8

**Table 2**  
Measurement model.

Construct	Composite Reliability (rho c)	Average variance extracted
Attitudes towards ChatGPT	0.967	0.879
Automatability	0.913	0.779
Availability	0.945	0.852
Discomfort with using ChatGPT	0.968	0.910
Effectiveness of ChatGPT	0.928	0.812
Lack of emotion	0.891	0.735
Limited understanding	0.921	0.796
Null decision making	0.952	0.870
Personalization	0.925	0.755

**Table 3**  
Assessing Discriminant Validity (HTMT).

Construct	1	2	3	4	5	6	7	8	9
1.Attitudes towards ChatGPT									
2.Automatability	0.513								
3.Availability	0.416	0.428							
4.Discomfort	0.057	0.092	0.067						
5.Effectiveness	0.599	0.667	0.602	0.087					
6.Lack of emotion	0.220	0.312	0.552	0.069	0.283				
7.Limited und	0.053	0.207	0.228	0.366	0.098	0.238			
8.Null dec making	0.111	0.200	0.334	0.398	0.165	0.345	0.429		
9.Personalization	0.377	0.709	0.378	0.198	0.594	0.216	0.083	0.188	

attitudes towards ChatGPT (H7). Discomfort with using ChatGPT is negatively associated with attitudes towards ChatGPT (H8) in which the hypothesis is not supported (Table 4).

The structural model is presented as Fig. 2 below:

Satisfactory results were obtained in structural model (Fig. 2). The adjusted R<sup>2</sup> values of perceived ChatGPT effectiveness, discomfort with ChatGPT and attitudes towards ChatGPT are 0.488, 0.187 and 0.303 respectively. Through bootstrap analysis with 5000 subsamples based on the 113 cases, path coefficients and t-values were calculated (Table 4).

The coefficient of determination (R<sup>2</sup>) was computed to measure the structural model's explanatory power. The coefficient of 0.75, 0.50 and 0.25 for the dependent variables can be regarded as strong, moderate and weak, respectively [31]. The R<sup>2</sup> of attitudes towards ChatGPT was 0.291, which was weak, and the R<sup>2</sup> of ChatGPT's effectiveness was 0.475, was moderate and discomfort with using ChatGPT is 0.166, which was weak. The change in R<sup>2</sup> was captured by the f<sup>2</sup> effect size. The values of 0.02, 0.15 and 0.35 were small, medium and large effects, respectively. The value of discomfort/attitude towards ChatGPT was 0.00, indicating no association. ChatGPT effectiveness/attitude towards ChatGPT is 0.432 was very large effect size value.

Finally, the Q<sup>2</sup> values were used to examine the model's predictive accuracy by using a blindfolding procedure. Values higher than zero represent certain predictive relevance for the PLS-path model [31]. The Q<sup>2</sup> values of all independent variables were greater than zero. The model has predictive relevance for the dependent variables.

The importance-performance map provides more information to our study (Fig. 3). Attitude towards ChatGPT is our target variable. Compare to discomfort with using ChatGPT (DIS), ChatGPT effectiveness (EFF) is much higher importance and performance. Within ChatGPT effectiveness, Availability (AVA) is the most important and highest performance, which is followed by automatability (AUT) and Personalization (PER). Regarding discomfort with using ChatGPT, Lack of emotion (EMO), limited understanding (LIM) and null decision making (NULL) are similar in importance whereas lack of emotion has higher performance than the others.

## 9. Discussion

We aim to identify how different types of affordances and disaffordances of ChatGPT would influence employees' perceptions of ChatGPT effectiveness and discomfort with using ChatGPT, which eventually influence employees' attitudes to use ChatGPT in their workplace.

Our findings demonstrated that all three ChatGPT features including automatability, personalization and availability are associated with ChatGPT effectiveness that influences attitudes towards ChatGPT. It concurs with the previous study on chatbot except for the availability in a broader range of employees in professional services, customer services, logistics and finance industries [6]. Employees believe ChatGPT brings advantages to improve their work efficiency and productivity for its high automatability, ability to provide personalized responses as well as immediate availability. ChatGPT can provide instant assistance and

**Table 4**  
Results of Hypotheses Testing.

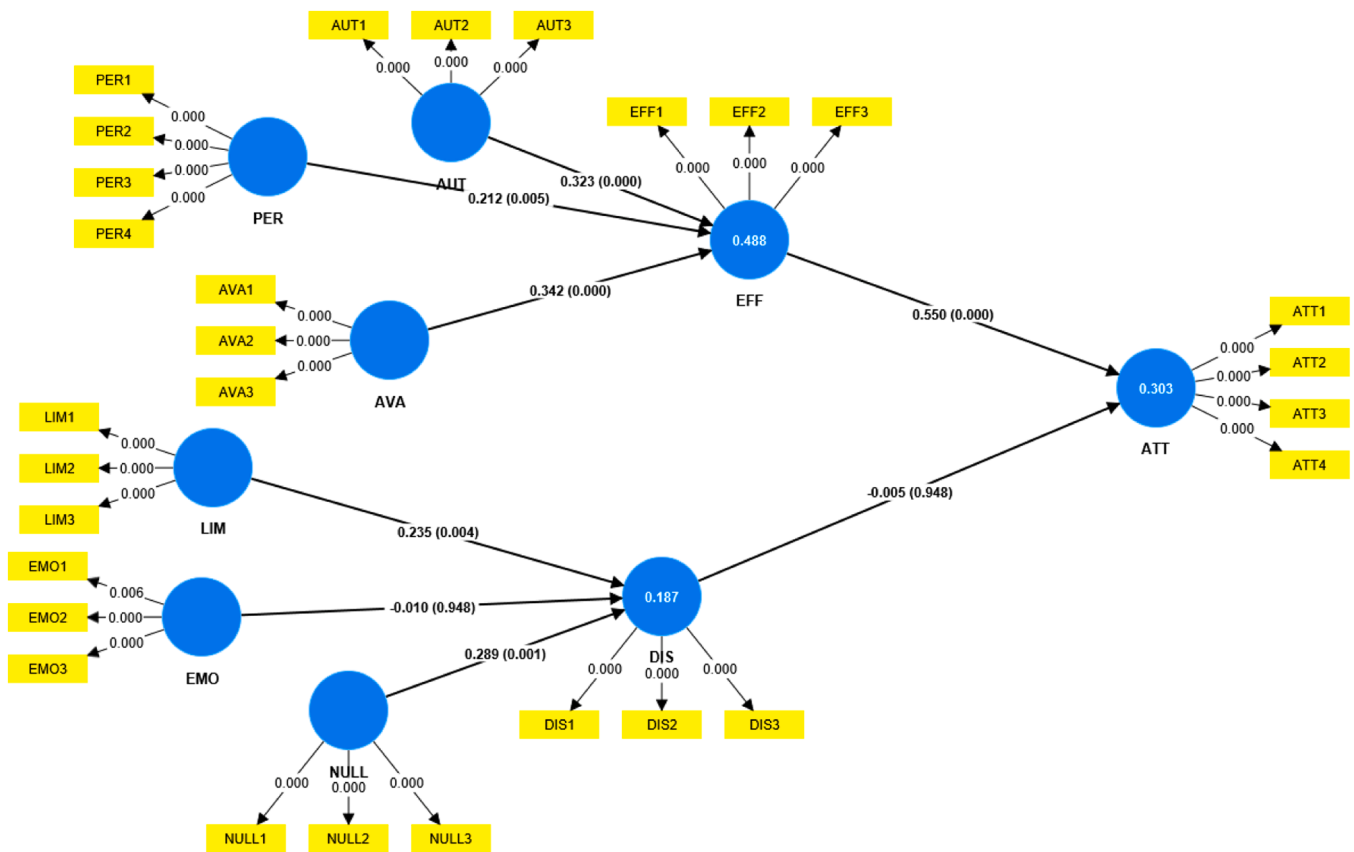
Hypothesis	Path	(β) Path Coefficient	t-value	p-value	Result	f-square (effect size)
H1	Automatability >> ChatGPT effectiveness	0.323	4.165	0.000***	Supported	0.117 (medium)
H2	Personalization >> ChatGPT effectiveness	0.212	2.799	0.005**	Supported	0.052 (small)
H3	Availability>> ChatGPT effectiveness	0.342	4.226	0.000***	Supported	0.190 (medium)
H4	Limited understanding>> Discomfort with ChatGPT	0.235	2.862	0.004**	Supported	0.057 (small)
H5	Lack of emotion>> Discomfort with ChatGPT	-0.010	0.066	0.948	Unsupported	0.000 (no effect)
H6	Null decision making >> Discomfort with ChatGPT	0.289	3.254	0.001**	Supported	0.084 (small)
H7	ChatGPT effectiveness>>attitude	0.550	6.307	0.000***	Supported	0.432 (large)
H8	Discomfort with ChatGPT>>attitude	-0.005	0.065	0.948	Unsupported	0.000 (no effect)

(Bootstrap samples = 5000, n = 113 cases).

+P < 0.1; \*p < 0.05;

\*\* p < 0.01;

\*\*\* p < 0.001.



**Fig. 2.** Structural Model.

quick responses to queries which can help employees obtain information and guidance immediately. Availability of ChatGPT is significantly related to ChatGPT effectiveness in this research, and the result is consistent with Lalicic and Weismayer [5]. The nature of ChatGPT is unlike human support which may have time constraints. Employees in different regions and time zones can also seek help from ChatGPT whenever and wherever they need. By using ChatGPT, it can reduce employees' workload such as in terms of answering customer enquiries regardless of time, providing research assistance, troubleshooting and translating text to enhance employees' work performance and companies' productivity. It is reasonable that the three ChatGPT features are positively related to the effectiveness of ChatGPT leading to the positive attitudes towards ChatGPT adoption.

Nevertheless, it is found that there is no significant association between lack of emotion and discomfort with using ChatGPT as suggested by Lin et al. [6]. We extend the Lin et al. [6]'s results on marketing

employees to other sectors including professional services, customer services, logistics and finance industries. It is expected that ChatGPT as an artificial intelligence (AI) language model has no emotions and feelings because a system should be objective and provide consistent responses. Employees are pragmatic compared to leisure users. Employees in the workplace have specific targets and deadlines. That is why lack of emotion is not associated with discomfort. On the other hand, limited understanding and null decision-making influence users' discomfort with using ChatGPT which can be considered as the limitations and deficiencies of ChatGPT. While ChatGPT can provide instant assistance and response to human enquiries, however, it is undoubtedly that ChatGPT could misinterpret the enquiries due to the encoding error. The way employees type the question may not truly reflect the intention of the employees. Furthermore, ChatGPT can only provide objective information without making any decisions for the employees. The current development of ChatGPT is still at its beginning stage to provide

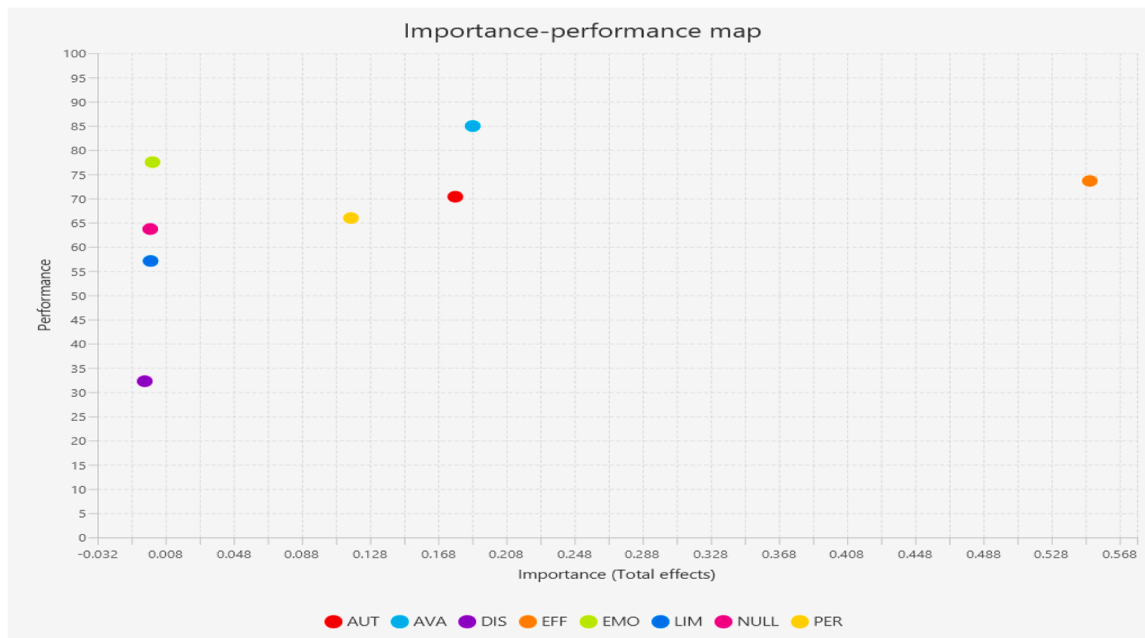


Fig. 3. Importance-performance map.

Key: AUT (Automatability); AVA (Availability); DIS (Discomfort); EFF (Effectiveness); EMO (Lack of emotion); LIM (Limited understanding); NULL (null decision making); PER (Personalization).

information, analysis or suggestions to support human decision-making. Employees should be able to make their own decisions based on the information generated by ChatGPT. Therefore, null decision-making relates to discomfort with using ChatGPT but it does not influence the attitudes towards ChatGPT. The result implies that ChatGPT cannot replace the human being. It is challenging to define the accountability of wrong decision made by ChatGPT. In order to have better use of ChatGPT in the future, ethical issue is needed to be addressed.

This study reveals no significant relationship between discomfort with using ChatGPT and attitudes towards ChatGPT, in which the results are contradictory with Castelo et al. [11] and Lin et al. [6]. It implies that the discomfort with using ChatGPT does not have any influence on employees' attitudes while using ChatGPT. Employees' tendency to adopt ChatGPT is mainly because of its benefits of reducing employees' workload and improving their efficiency. The discomfort with using ChatGPT does not lead to hesitation of using it in their workplace. ChatGPT becomes popular in these two years and people are curious and interested in it. It is convenient and readily available and therefore, people are not aware of the discomfort with using them especially for the employees. Employees' negative perceptions towards ChatGPT do not influence any of their adoption of ChatGPT because it can reduce their workload and enhance their productivity. People are open to accept the limitations of using ChatGPT.

Finally, it can be derived from the importance-performance map that the effectiveness of using ChatGPT overrides the discomfort of using ChatGPT. Even though ChatGPT may be lack of understanding, lack of emotion and null decision making, its 24/7 availability, followed by its automatability and personalization still play important role to influence the adoption of ChatGPT in the workplace. Simple and repetitive tasks are suitable using ChatGPT while decision making might not suitable at this moment. Companies should make ChatGPT available for employees to use in workplace while training on how to overcome its discomfort should be provided.

### 9.1. Theoretical contribution and practical implications

To conclude, this research contributes for both academia and practitioners. This research provides further support from the perspective of

technological affordances to understand ChatGPT effectiveness. The three affordance factors of automatability, personalization and availability are all associated with ChatGPT effectiveness. On the other hand, only limited research was conducted using the underexplored lens of disaffordances [26]. This research further empirically tests the constructs (i.e., limited understanding and null decision-making) leading to ChatGPT disaffordance. Then, a model determining attitudes towards ChatGPT was developed to explain the formation of employees' attitudes towards ChatGPT adoption in the workplace supported by the affordance and disaffordance perspectives. Lastly, SDT was further validated to demonstrate that when employees' psychological needs are satisfied, they have higher motivation to use ChatGPT.

Regarding the practical implications, since ChatGPT effectiveness highly associates to employees' attitudes towards ChatGPT, companies should ensure that ChatGPT would fulfil the excellence of three features affecting its effectiveness which are automatability, personalization and availability. The vendors should ensure the system of ChatGPT to be able to meet these criteria to serve the employees' needs. Employees form positive attitudes towards ChatGPT because of its effectiveness regardless of the discomfort with using ChatGPT. Therefore, companies should the ChatGPT system updated for assisting employees to complete some routine tasks or low-level tasks to improve their productivity and efficiency. In the meantime, for companies requiring creativity like advertising, media and event planning, the over-reliance on ChatGPT may hinder the performance of the employees. Companies should prepare policies or guidelines for ChatGPT adoption in their workplace to maintain the competitive edge. Training on the utilization of ChatGPT in the workplace should also be provided, such as on background research, generation of creative ideas, and further development of skills in terms of writing, analysis, problem-solving and critical thinking. It is undoubtedly that ChatGPT becomes commonly used nowadays, companies should make careful consideration of ChatGPT for optimising the use of ChatGPT and addressing its potential issues.

## 10. Conclusion

This research proposes a new research model of employees' attitudes towards ChatGPT in their workplace. It was found that three ChatGPT

affordances including automatability, personalization and availability were associated with ChatGPT effectiveness. Two ChatGPT disaffordances including lack of emotion and null decision making were associated with discomfort when using ChatGPT. Attitude towards ChatGPT was associated with ChatGPT effectiveness only.

This research only focuses on examining the impact of different types of affordances and disaffordances on employees' perceptions and subsequently influencing their attitudes towards ChatGPT adoption in the workplace. Future research might explore the influence of demographic factors of employees such as age, work position, educational level, income as well as the contextual factor such as industry type. The comparative study between employees' perceptions and students' perceptions towards ChatGPT might be carried out for discussing their adoption behavior. It aims to provide additional insights for ChatGPT developers related to usefulness and practicality of ChatGPT in different contexts. Furthermore, longitudinal studies that explore how perceptions of ChatGPT change over time or studies comparing different organizational cultures and national cultures could be explored. Finally, other AI tools like Robotics is likely to be good topic for research. Comparative analysis among AI tools then could offer a wider perspective.

### Ethical approval

Ethical approval has been obtained prior the data collection work (RC/ETH/H/220).

### Generative AI

Authors do not use any generative AI in scientific writing.

### CRedit authorship contribution statement

**Tai-ming Wut:** Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Elaine Ah-heung Chan:** Supervision, Resources.

### Declaration of competing interest

None.

### Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.sftr.2025.100632](https://doi.org/10.1016/j.sftr.2025.100632).

### Data availability

Data will be made available on request.

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