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Generative AI, Cultural Information Risks and the Negotiation of Youth Cultural Identity: A Qualitative Comparison of University Students in Guangdong, Hong Kong and Macao

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Abstract: Generative Artificial Intelligence (GenAI) is changing how young people access cultural knowledge and understand sociocultural narratives. Some research has examined the information risks of Generative AI (GenAI), but few have studied how young people from different cultural backgrounds perceive and are affected by these risks. Based on the interviews conducted with 33 university students in Shenzhen from Guangdong, Hong Kong and Macao, this paper conducts thematic analysis and cross-background comparison of their views on risks to cultural information, strategies for identity negotiation and related sociocultural experiences. Based on the above analysis, the three main topics are: (1) the three perceived risks: information distortion, cultural misrepresentation and information homogenization; (2) the three identity negotiation strategies in response to AI-generated cultural information: identity affirmation, identity reconsideration and identity defense; and (3) associations of language use, platform exposure and cross-regional cultural experiences with different interpretations and responses to cultural information by participants. Based on the data in this paper, it has been determined that participants' previous cultural experiences are incorporated into their perception and response of AI-generated cultural materials; therefore, this study will provide specific evidence to help improve the critical evaluation of cultural information and digital literacy education for young people in the Greater Bay Area.

Keywords: Generative Artificial Intelligence; Cultural Information Risks; Cultural Identity Negotiation; University Students; Guangdong-Hong Kong-Macao Greater Bay Area.

1. Introduction

The development of generative artificial intelligence (GenAI) has changed how people obtain information and learn about society and culture. Different from the former type of Internet platform, which is based on information retrieval, content recommendation and user-generated content, Generative AI can create customised, context-aware and coherent texts and explanations according to the particular demands of users in natural language. Therefore, it has started to be used as a way for people to learn about culture and share it. Schuetz and Venkatesh think that intelligent systems with human-like cognitive abilities are changing the traditional ideas of reliability and transparency in research on human-computer interaction as well as the relationship between people and technology [1]. Young people are still forming their cultural awareness and sense of identity, so Generative AI will likely change how they learn about history, language, traditional culture and society. Through continued contact, they will learn to feel a sense of culture, belong to a group and form their own identities. Therefore, more attention should be paid to how young people understand, judge and integrate AI-generated cultural information, and how it relates to their own cultural knowledge.

GenAI will help spread the culture, but it may also bring new problems for cultural literacy. First, large language models may generate historical and cultural information that is factually incorrect, lacks identifiable sources, or is fabricated; thus, there is a risk of spreading distorted information to the public. Secondly, the cultural information produced by these models will be limited to the training data and cultural values of that data, thus failing to present all sides of different cultures and resulting in cultural misrepresentation. Tao and others have discovered that some large language models have certain cultural values and that culturally specific prompts can improve the cultural appropriateness of the output to some extent [2]. Lu and others have also found that Generative AI may have different cultural inclinations in different languages, so language is not only a way to express ideas but can also influence the cultural explanations generated by AI [3]. In the process of synthesis and generation of information, GenAI may give more weight to some cultural explanations and ignore others, leading to a perception of information homogeneity. Kitchens and others (2020) have shown that the characteristics of social media platforms and users' behaviour together affect information exposure, and thus they can help us understand information homogeneity in the digital era [4]. However, Generative AI is not organised in the same way as social media. Whether young people know about the above-mentioned risks to cultural information, how they interpret the content of this information, and what their responses are have not been fully explored in recent years; thus, further research is needed.

Little attention has been paid to how young people use their own cultural experience to interpret and react to AI-generated content. Social identity theory suggests that individuals' sense of group belonging, together with the emotional and value significance attached to group membership, constitutes an important aspect of social identity [5]. Young people who

come across AI-generated cultural information will be able to assess and interpret it according to their own cultural knowledge, life experiences and sense of group identity. If the AI-generated cultural narrative is different from what young people are already familiar with and feel, we need to find out how they judge this new story and change their cultural identity accordingly. Cultural identity is also relative to context; different language environments, digital platforms and intercultural exchanges will affect how people interpret and evaluate the same cultural content. Therefore, this paper will study the connection between the perceived risk of AI-generated cultural information and identity negotiation among young people.

Guangdong, Hong Kong, and Macao provide a valuable comparative context for examining these issues. The three areas have some shared history and culture, language resources and regional connections, but are different in sociocultural experience, media environment and local culture. Young people in the cross-regional social space of the Guangdong-Hong Kong-Macao Greater Bay Area encounter all sorts of cultural stories in their daily lives, education, cross-border movement and on digital platforms. They can also use GenAI to learn about the history, culture and social life of their own places and other places. Their cultural identities may have several levels of local cultural roots, identification with Chinese culture, and a sense of belonging to the Greater Bay Area. Therefore, the interpretation and evaluation of AI-generated cultural information can be based on experiences that are not limited by region, such as language use and the experience of studying and life in different places. University students in Shenzhen who are from the three areas studied in this paper are the subjects of this research. Compare the perceived risk of cultural information in Generative AI among the group with their actual experience of cultural identity negotiation, and explore how different cultures are handled in terms of identity negotiation.

Given the above reasons and in light of the above deficiencies, this paper will investigate the possible risks to young people's cultural identity in the era of Generative AI and how they perceive and respond to these risks in various sociocultural environments. The three linked research problems are as follows: (1) What are the general risks that university students from Guangdong, Hong Kong and Macao face in their use of generative artificial intelligence (GenAI) to obtain cultural information? (2) How do young people perceive the AI-generated cultural narratives, and in what ways do they construct a sense of cultural identity through acceptance, questioning, verification or reinterpretation of these narratives? (3) How are language use, platform exposure and cross-regional cultural experiences related to the similarities and differences in their strategies for identity negotiation? In light of the above problems, this paper will use qualitative comparative analysis. Based on semi-structured in-depth interviews with 33 university students from Guangdong, Hong Kong and Macao who study in Shenzhen, this paper will use thematic analysis and cross-background comparison to explore the link between the perceived risks of Generative AI, the negotiation of cultural identity and sociocultural contexts.

This paper has some theoretical and applied values. First, it extends the discussion of cultural information risks in GenAI to the subjective perception and response of users, exploring how cultural identities are affirmed, reconsidered or defended in particular information encounters. Second, according to the reactions of young people to AI-generated cultural information, this paper will explore how shared technological risks are perceived, contextualised and negotiated in the construction of cultural identity. The above framework can help us understand how young people build and maintain their cultural identity in the digital age through the exposure to and evaluation of information, and it can also provide a new research direction for technology risk and cultural identity. Thirdly, in comparingGuangdong with Hong Kong and Macao, one should also take into account the different circumstances, such as language conditions, platform ecosystems and cross-regional cultural exchange. These findings may offer practical recommendation for the culture adaptation of generative AI， youth digital literacy education, and AI risk governance in the Greater Bay Area.

2. Literature Review

2.1. Generative AI and Risks in Cultural Information Environments

GenAI is changing the way cultural information is created and spread. Different from the old way of doing information retrieval, it can also collect data from various places, create informative materials based on people's queries, and adapt to new demands through continued use. Therefore, the cultural information that users obtain includes not only the existing materials but also reorganisations and interpretations of the AI based on all kinds of knowledge and perspectives. Schuetz and Venkatesh think that the contextual adaptability and human-like interactive features of cognitive computing systems have changed the traditional assumptions in the field of human-computer interaction research on system transparency, reliability and the relationship between people and computers [1]. As GenAI is used to generate explanations of history, traditional culture and life in society, the cultural authenticity of this content should be paid attention to.

The cultural information provided by GenAI is not fixed; it will change according to the language of communication, prompts and so on. Lu et al. have found that Generative AI has different social orientations and cognitive styles in Chinese and English, and the language of interaction may be related to the cultural tendencies of model output [3]. The difference is not only in language but also in how the models represent cultural values. Tao et al. have assessed many large language models and found that some are closer to the cultural values in the West [2]; therefore, culturally adapted prompts can improve cultural congruence to a certain extent. In addition to the lack of cultural representation, GenAI may also generate plausible but false content and thus spread misinformation about culture. Therefore, models, prompts and interaction languages will introduce users to many types of culture.

Personalized Interaction with GenAI has also resulted in problems of diversity of cultural information. Research on traditional social media has studied how algorithms and user behaviour together determine the information people see. Kitchens et al. found that the impact of social media on the variety of information sources and the direction of people's views differed among different platforms [4]. Therefore, it can be concluded that the spread of information on digital platforms will vary according to the attributes of these platforms and the behaviour of users. GenAI will answer some questions from you interactively and provide related

information in the process. At the same time, some cultures may be favoured and others ignored, and there is a risk of information homogeneity. Whether young people are aware of this risk and how they interpret and react to such content have not been studied.

2.2. Youth Cultural Identity and Identity Negotiation

Cultural identity is one's sense of belonging to a culture and the identification with one's cultural background and group. It will change as people explore their identities and make choices [6]. Social identity theory believes that people's sense of self is also based on their membership in a group and the value and emotion associated with that group [5]. Phinney proposed in his study of ethnic identity that identity exploration and group belonging are important for people to know and feel their group identity [7]. Although ethnic identity is different from local and regional culture, these discussions can also reveal how young people are forming their sense of cultural identity at all levels.

Identity negotiation is the way people actively explore, maintain or change their sense of self in social situations. Identity is related to the social environment and groups a person belongs to. Hogg et al. compared identity theory and social identity theory, highlighting the roles of social relationships, group membership, and social contexts in shaping individuals' sense of identity [8]. Swann proposed that people are motivated to obtain feedback that aligns with their self-perception and thus continue to uphold that view [9]. Based on the above, when young people are exposed to AI-generated content that contradicts their cultural experience, they may choose to accept it, question it or reconsider it, or keep their original views and affirm their identity.

Generative AI has begun to show some potential for the research of cultural identity negotiation among young people. AI can give organised and interactive answers to people's questions about the history and culture of a group; this is different from traditional face-to-face cultural exchange. Interaction can be used to gain cultural knowledge and learn about other cultures. AI-generated cultural information may also have biases or inaccuracies that are inconsistent with the actual experiences of young people. How young people are informed of this information, and how they evaluate it in terms of affirmation, reconsideration and defence of cultural identity, need to be studied further.

2.3. Sociocultural Contexts and Cross-Regional Identity Differences

Cultural identity is understood and negotiated in particular sociocultural contexts, and it is formed jointly by people's cultural backgrounds and information environments. Culture and life experience affect people's reception of cultural information. Berry examined how cultural and social contexts shape individuals' acculturation processes [10]. Therefore, young people from different cultural backgrounds may interpret and react to the same information in different ways. GenAI also has the same problem of context dependence in the application of technology. Lu et al. have found that differences in language can alter the cultural inclination of GenAI output [3]. Therefore, the language environment will affect how people learn to use language and what culture they are exposed to.

Cultural exchange between different regions has also played a significant role in shaping the cultural identities of young people. Interactions with individuals from different regional and cultural backgrounds may broaden young people's cultural understanding and influence their sense of identity and belonging. Therefore, young people's understanding of and identification with different cultures may be shaped by both their actual social experiences and their regions of origin. Cross-regional experiences, everyday interactions, and interpersonal relationships provide important cultural reference points through which young people can interpret and evaluate media narratives, rather than relying solely on cultural knowledge acquired indirectly through digital media.

Guangdong, Hong Kong and Macao are closely related in history and culture but have also developed different local languages and digital media environments, so they offer rich material for comparison [11, 12]. University students in the three regions may encounter the same GenAI technology but use different languages, platforms, sources of information and have experienced cross-regional life in various ways. Regional affiliation is not to be taken as a person's cultural identity. Young people can have local cultural identities, be proud of Chinese culture, and belong to a region. Therefore, this paper will compare university students from different areas in Shenzhen to study the influence of language, platforms and cross-regional contact on their understanding and response. Although the previous research on cross-cultural and intergroup contact has offered some theoretical support for understanding these differences, more studies need to be conducted to explore how these factors work together to affect the negotiation of cultural identity in Generative AI.

3. Research Design

3.1. Research Approach

A qualitative comparison method will be employed in this paper to investigate the potential risks faced by young people in their use of Generative AI for cultural information and how young people from different sociocultural backgrounds perceive, interpret and respond to these risks. Negotiation of cultural identity is very context-dependent. Besides determining whether the AI's content is true or false, people also bring their own culture, life experiences and feelings of belonging to judge it. Therefore, semi-structured interviews were carried out to learn about people's actual experiences with GenAI, as well as their opinions and responses to cultural information; thus, it was hoped that links between the risks of cultural information and changes in cultural identity could be better understood.

Participants were university students in Shenzhen who had grown up in Guangdong, Hong Kong or Macao. Compare the regions in this paper. First, the interview transcripts were coded to find some main ideas and specific examples. Then, the typical traits and distinctions of these themes were compared in different settings.

3.2. Research Context and Participants

Convenience sampling was employed in this paper, and 33 university students from Shenzhen who had such experience were selected. The two groups were 14 men (42.42%) and 19 women (57.58%). There were 6 first-year students (18.18%), 8 second-year students (24.24%), 8 third-year students (24.24%) and 11 fourth-year students (33.33%). Participants were from Guangdong, Hong Kong and Macao, and there

were 11 in each group (33.33%). In terms of Generative AI, 25 people (75.76%) said they used it frequently, 5 people (15.15%) used it moderately, and 3 people (9.09%) used it rarely (see Table 1). This group of people was chosen for two reasons. Firstly, university students are a typical user group of GenAI and can talk about their experiences with AI-generated information in the context of daily study and life. Secondly, although students from different areas study and live at the same university and have a similar immediate environment, they are raised in different places, have been exposed to different cultures, and are from various regions; thus, there are inherent differences.

Table 1. Demographic Information of Interviewees (n = 33)

Category	Characteristics	N	%
Gender	Male	14	42.42
	Female	19	57.58
Year of Study	First-year	6	18.18
	Second-year	8	24.24
	Third-year	8	24.24
	Fourth-year	11	33.33
Region of Origin	Guangdong	11	33.33
	Hong Kong	11	33.33
	Macao	11	33.33
Frequency of GenAI Use	Frequent	25	75.76
	Moderate	5	15.15
	Infrequent	3	9.09

3.3. Data Collection

Some people were interviewed informally to gather information. Based on the research goals and some initial studies, the team prepared an interview guide with the following three sections.

The first part is about people's experiences with Generative AI and their sense of risk. Questions asked of AI tools, situations in which they are used, how to obtain cultural information through them, and one's perceptions of the accuracy, cultural representation and diversity of the content. All of the above are regarded as risks to cultural information.

The second part is about how young people understand and react to AI-generated culture. Based on their own experiences, the participants talked about how they would judge the reliability of information that contradicted their existing cultural knowledge or life experience, whether they would carry out further verification and reinterpretation, or keep their original views.

The third is about people's cultural life and how they receive and understand culture. The questions are about the use of language, exposure to all kinds of AI platforms, and experiences in studies, daily life and cross-border cultural exchange among the Guangdong, Hong Kong and Macao. The above accounts were used to compare the perception of risk and identity-negotiation in different areas.

There were no closed-ended questions. In addition to the general set of basic questions, some follow-up questions were added according to the participants' answers to obtain more specific examples and personal feelings. Each interview was about 20-30 minutes long. To avoid leading the participants' answers, the questions were phrased in a neutral manner so that all types of effects of GenAI on cultural literacy could be raised by the participants.

3.4. Data Analysis

Based on thematic analysis of the interview data and cross-cultural comparison, some similarities and differences have been observed in people's experiences of risk and the construction of identity across cultures. Thematic analysis is an easy way of knowing; therefore, codes are used to find patterns in the data, and then these patterns are organised and interpreted to present an organised result of participants' subjective experiences [13].

The three stages of the analysis are: First, preliminary coding was used to identify and organise the interview data related to the application of GenAI, opinions on cultural information, and experiences with identity. Based on the previous studies of information distortion, cultural misrepresentation and information homogenization, this process was carried out, and the main topics were collected from participants' stories.

Second, the answers given by the participants, such as acceptance, confirmation, reinterpretation and rejection, were observed to find identity negotiation strategies and their importance for cultural identity.

Finally, there was a comparison of participants from different areas. Given the language used, the platforms available, and exposure to cross-regional culture, we have compared various regions both among themselves and against each other to find reasons for the differences.

4. Findings

4.1. Shared Technological Risks in AI-Mediated Cultural Information

RQ1 examines the risks that university students in Guangdong, Hong Kong and Macao are aware of in the use of Generative AI for cultural information. The three related topics that arose from the interviewees' words are information distortion, cultural misrepresentation and information homogeneity. Information distortion is the falsification of AI-generated cultural works. Cultural misrepresentation is due to a lack of understanding of local culture and group characteristics. Information homogenisation is to say, the range of cultural views and explanations is narrow.

4.1.1. Information Distortion: Uncertainty in Cultural Knowledge

Information distortion is a problem in the process of presenting historical events, cultural traditions and local social phenomena; GenAI generates information that is either unsubstantiated or contrary to the actual circumstances. GenAI can provide an organised and fluent answer, but some participants did not find that this answer matched their current knowledge, so they chose to verify it. One is that the incorrect information will spread, leading to a cognitive conflict with one's own cultural knowledge and experience.

“I once had AI help me learn about a local tradition. It provided me with some detailed information, but later I found out that it was not what I had been told. So now, when a question is about history or culture, I usually look it up elsewhere.” (P04, student from Guangdong)

The participant considered the difference between the AI's explanation and what they already knew as a prompt and then checked it by looking up related information.

The purpose of this account is to show how the participant responded to the inconsistency. The first is an introduction of an ordinary custom, but since people know it, there are many questions. Thus, the above material can be used as a reference to evaluate the explanations provided by AI. It does not indicate the extent of the original error, as it has not been independently verified. It can be seen that the person did not

agree with the first answer and checked more thoroughly instead.

4.1.2. Cultural Misrepresentation: Simplification of Local Cultural Experiences

Cultural misrepresentation is an oversimplification of the cultural traditions, social life and other features of a place, which fails to consider the diversity of local cultures. This is not to be confused with the first kind; it is not necessarily false. When young people find that AI cannot reflect the cultural contexts they are familiar with, they may feel that their own lives and experiences have not been properly understood or represented.

"Sometimes when I ask AI about Hong Kong culture, the answers are too general; it's as if all the people in Hong Kong are the same. But people from different families and different generations can live in very different ways." (P15, student from Hong Kong)

P15 believes that AI's descriptions of Hong Kong culture are too general and do not consider the differences in daily life among families and different age groups. The missing items led the subject to question the generalisations in the AI's answers.

The problem is not that Hong Kong does not have common cultural attributes. It is that an inventory of these characteristics seems to leave too little room for variation among the community. P15 mentions families and age groups, and does not specify the types of variation that the answer referred to. Thus, the problem of cultural misrepresentation is one of the extent and appropriateness of context, as well as accuracy. It can be recognised in general terms, but it does not show the variety of daily life.

4.1.3. Information Homogenization: Limited Exposure to Diverse Cultural Narratives

Homogenisation of knowledge refers to the assimilation of many individual knowledge systems in a specific society and is the result of prolonged social interaction. Although GenAI can provide some general answers to people's questions, it may not cover all the various views on a cultural problem. Some of the participants were gradually aware that the explanatory scope was limited and changed how they asked their questions to get other answers.

"I found that if I continued to ask the AI in the same way, it would give me the same answers. Only when I changed the way I asked did I learn about it from others. Therefore, I do not believe that what AI presents is necessarily the whole truth."(P27,student from Macao)

By altering the wording of the question and receiving various explanations, P27 began to doubt the adequacy and diversity of a single answer.

This case also shows that the perception of information homogeneity does not necessarily lead to continuous acceptance of the same answer. Rephrasing the question was a way to test the limits of the first explanation. Therefore, the participant thought that the AI's answer was just one option among many. The excerpt supports the idea that it is active information exploration, but it does not show that the model's output became more diverse objectively or that the participant's cultural identity was changed as a result.

Together, the above topics show how participants have judged the credibility of the AI-generated information, which parts of local culture have been presented, and whether other explanations have been offered. One can observe how the participants react to this information by the other.

4.2. Cultural Identity Negotiation in Response to Generative AI

RQ2: How do young people feel about AI-generated cultural stories, and is this feeling related to their sense of cultural identity? The three types of identity negotiation strategies in the interview accounts are identity affirmation, identity reconsideration and identity defence. These strategies do not categorize the participants; rather, they are different responses that young people may have in various situations.

4.2.1. Identity Affirmation: Reinforcing Existing Cultural Understandings

Identity affirmation is achieved when young people find that the AI-generated works are consistent with their own cultural knowledge and life experiences, thus feeling that they have obtained some additional support for their cultural literacy. Some of the participants compared what the AI said with their cultural memories and thus learned more about their own culture.

I occasionally have AI tell me about the old festivals in my hometown. What it shows is quite similar to what my family used to do when I was little. It makes me feel that these traditions have always been related to my own life. (P08, student from Guangdong)

P08 linked AI's descriptions of hometown festivals to his own childhood. It confirmed the existing cultural awareness and enhanced the sense of belonging to the culture among the people.

4.2.2. Identity Reconsideration: Reinterpreting Cultural Boundaries

Identity reconsideration happens when young people learn about different cultures through cultural explanation and, by comparing and reflecting, change their views on other groups. Some of the participants used AI to create learning materials on the culture of other places.

"I used to think that the Greater Bay Area was only about economic integration. Later, I had AI tell me about the cultures of a few cities, and there were many similarities. I looked into it further and began to believe that there were more cultural links between the two cities than I had previously known."(P19,student from Hong Kong)

After learning about the AI-generated cultural information, P19 further investigated and began to explore the cultural connections among the cities in the Greater Bay Area. As shown in the above account, AI-generated works of art can provide new ideas for regional cultural exchange.

Reconsideration here refers to an expansion of the idea of regional connection and is not to be taken as a rejection of one's former identity. P19 proposed that in addition to the economic integration of the Greater Bay Area, cultural convergence should also be promoted. Therefore, it should not be assumed that this change is solely due to the AI's reply. The example shows how generated information can pose a problem for the participants, and they then try to solve it themselves and link it to their sense of cultural identity.

4.2.3. Identity Defense: Maintaining Cultural Interpretive Autonomy

Identity defence takes the form of doubt in, rejection of or modification to the cultural narratives produced by AI; young people feel that these narratives are too far removed from their own lives, too stereotypical or too generalised, and thus protect their existing sense of culture. They do not accept the contents as they are; instead, they will use their own experiences to judge the AI-generated cultural narratives.

When AI introduces Macao's culture, it sometimes only mentions tourism, hotels and Portuguese-style buildings. But our daily lives are also about more than that. I feel that it is the Macao other people know, but not entirely the Macao I have lived in. (P30, student from Macao)

P30 drew from his own life to contradict AI's tourism-oriented depiction of Macao and argued that local culture should not be reduced to a few well-known symbols. As shown in the accounts of P08 and P19, young people can actively respond to AI-generated cultural information by affirming, reconsidering or defending their own cultural knowledge.

The subject of comparison in all the above cases is how a generated story relates to people's culture. Agreement with remembered practices is affirmation; an unfamiliar connection is a call to think again; an overly narrow representation is a defence. These are interpretations of the quoted encounters and not fixed mappings of regional groups to strategies. In particular, the examples do not show that mainland students are the primary ones affirming, Hong Kong students are reconsidering, or Macao students are defending their identities. Such group-level patterns would need to be supported by other evidence and are not shown in the illustrative stories above.

4.3. Contextual Differences in Cultural Identity Negotiation

To address RQ3, this paper has moved away from examining the forms of identity negotiation employed by young people and will now investigate the circumstances in which these responses take place. Although all the participants studied at universities in Shenzhen, they may have used different languages, been exposed to various types of digital platforms and cross-regional cultural experiences. These cases can help us know why the participants interpreted the cultural information differently.

4.3.1. Language Environment and Cultural Interpretation

Language environments will affect how young people obtain and interpret AI-generated cultural information. Different language groups may be able to learn about and share cultures in different ways; therefore, they may have been able to learn different stories.

“I sometimes ask the same cultural question in both Chinese and English, but the answers are slightly different. The Chinese answer may have more local context, and the English one is relatively general, so I will look at both together.” (P17, student from Hong Kong)

P17 compared the Chinese and English answers and found that the AI had given different explanations for the same cultural problem. Therefore, language is not only a means to access culture but also a resource for comparing and judging the various aspects of AI-generated works.

4.3.2. Platform Ecosystems and Information Verification

Different AI platforms have presented various cultural materials for young people to learn from. Some participants mentioned that they used many AI tools for research on history and local culture and compared the results from these different tools.

“An average question only needs to be asked of a single AI. But if it is about history or the culture of different places, I will try a few tools to see if they are the same.”(P11,student from Guangdong)

P11 indicated that the answers from various AI tools on the explanation of the cultural problem were not uniform. Therefore, cross-platform applications will provide more reference material for evaluating AI-generated cultural information, although there is no guarantee that the answers are correct.

4.3.3. Cross-Regional Cultural Contact and Experiential Knowledge

Some references for the assessment of AI-generated works can be obtained by means of cross-regional cultural exchange. Young people who have studied, lived or participated in long-term exchanges across different regions may have obtained some knowledge from their own experiences and can therefore evaluate AI's representation of local culture differently.

Since I came to Shenzhen for school, I have met many students from all over. When AI describes the differences between Guangdong and Macao, I compare what it says with my own experiences. Some of it is correct, but some of the differences are not as obvious as they sound. (P25, student from Macao)

P25 compared the AI's descriptions of cultural differences between Guangdong and Macao with their own experiences interacting with others in Shenzhen, and pointed out that there were too many categorical generalisations. Therefore, inter-regional cultural exchange can add new knowledge of various areas to the young generation and give them hands-on experience in judging AI-generated works.

Based on the interview excerpts above, it can be seen that asking questions in different languages, comparing platforms and communicating across regions are all ways of obtaining reference materials for understanding and evaluating AI-generated cultural information, and thus can affect how participants respond to its cultural stories.

The contexts of the resources are also different in terms of judgment standards for people. According to language comparison, the emphasis has shifted to platform comparison to determine whether the answers are the same or different, and cross-regional experience provides a living reference point for the above descriptions. None are guaranteed to be correct. Their purpose is to increase the number of ways people learn about culture. Based on the above accounts, it can be concluded that the connection between regional background and identity negotiation should be studied through specific instances of information use and cultural contact, rather than being assumed solely based on regional labels.

5. Discussion and Conclusion

5.1. Interpretation of Key Findings

This paper will identify the possible risks to the cultural identity of young people in the era of GenAI and analyze the different types of risks in various regions, focusing on threats to cultural information, identity negotiation and sociocultural experience. According to the above interviews, young people are actively integrating and responding to the AI-generated cultural explanations based on their own cultural backgrounds. Their understanding is related to the correctness, representativeness and diversity of the information itself, as well as to their own cultural experiences and social backgrounds. Figure 1 is the general structure of the analysis in this paper.

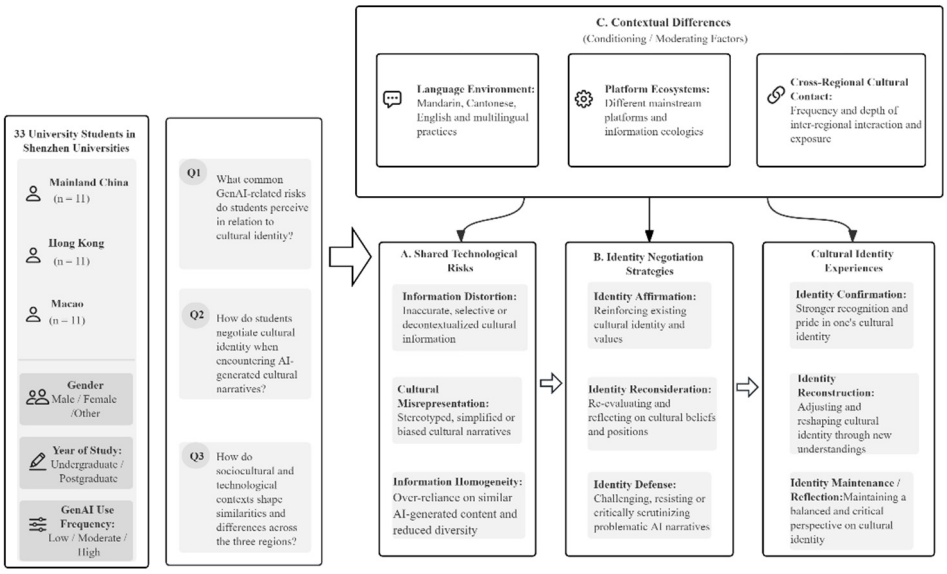

Figure 1. Cultural Information Risks, Identity Negotiation Strategies and Sociocultural Experiences

Based on the accounts of the participants in AI-generated cultural content, there are three types of risks: information distortion, cultural misrepresentation and information homogenization. This is in line with other studies on cultural bias in large language models. Ji et al. believe that although natural language generation can be fluent, it may also be incorrect in terms of facts[14]. Agarwal et al. found that AI-generated writing suggestions can homogenize writing styles and diminish cultural nuances[15]. This paper also finds that the participants did not merely judge whether the AI's answer was reliable; at the same time, they also added their own meanings to the cultural connotations of that answer. Errors and stereotypes may lead to skepticism, but the same occurrences can also make people verify the cultural knowledge and reconsider their own experiences. The accounts of P04, P15 and P27 are examples of information checking, questioning generalizations and actively seeking alternative explanations, respectively; these show that participants are willing to judge and reflect on potential risks to cultural information.

Second, identity affirmation, identity reconsideration and identity defence are three ways to understand the negotiation of cultural identity by young people. This is consistent with social identity theory, which emphasizes the role of group membership in shaping individuals' self-concept [5]. Swann further suggested that individuals seek feedback consistent with their existing self-views to maintain a stable sense of identity [9]. Generative AI will continue to offer explanatory cultural narratives for young people to compare with their own cultural experiences, and this is not the same as traditional interpersonal communication. Based on the information given and their own experiences, the participants reported that they had accepted, reflected upon or questioned the explanation. The answers did not need to be in a certain order and could change based on circumstances.

Finally, language use, platform exposure and cross-regional cultural exchange may also be related to the different ways young people are affected by AI-generated cultural information. According to Berry (1997) [10], a sense of cultural identity and acculturation are shaped by one's situation. Language can influence how young people present problems in traditional culture and what stories Generative AI can create; platform use behaviour will also affect the verifiability of this information. Studies and life in all kinds of places can also be taken as direct references for the evaluation of AI-generated cultural content. Although the regional background is one of the comparison factors in this study, the responses cannot be attributed solely to the region of origin. They should also be considered in light of people's language habits, platform access and cross-regional experiences.

In short, the results indicate that people's perception of cultural information risk and their strategies for identity negotiation are related, but they do not occur in a fixed order. Concern about representation may lead one to defend an old idea of culture, but when presented with new views, one may also be willing to change that view. Affirmation is also about feeling in line with one's own experience and does not necessarily mean trusting AI blindly. The analysis framework will present the above relationships but does not specify how these will develop in time or whether they will continue after the encounters mentioned in the interviews.

5.2. Theoretical Contributions

This paper has three theoretical contributions.

First, it gathers people's perceptions of information risk and the negotiation of cultural identity in one place to extend the study of AI-generated cultural information. Tao et al. and Lu et al. have paid some attention to the reliability of information and cultural bias in the research of Generative AI [2, 3]. How do young people make sense of this information, and how does it relate to their experiences of cultural identity? The main ways young people are using AI-generated cultural information now are by verifying it, comparing it, etc. Therefore, this paper will study both the attributes of the model's output and the cultural connotations that users have attached to the created works.

Second, the study extends the concept of identity negotiation to the interaction of young people with GenAI in cultural information. The previous identity theories have mainly investigated how people know about their own identity, keep it going and change it in relation to groups and

others [5, 9]. Based on the above, it can be concluded that AI-generated works of art may also be subjects for reassessment of culture. The strategies of identity affirmation, identity reconsideration and identity defence in identity negotiation can be used to show how young people confirm, modify or maintain their cultural literacy in the face of consistency or conflict between AI-generated content and their own cultural experience. It is a new type of cultural identity construction in the Information Age.

Third, the study takes into account sociocultural experiences and other contextual factors in the research on GenAI, paying attention to the fact that the same technological risks may be perceived differently in various language environments, platform-use behaviours and experiences of cultural contact. Given the above reasons, this paper will study changes in technology and culture among different societies from a risk perspective. The above framework will offer a reference for future research on human-AI interaction and cultural identity in all parts of the world.

5.3. Practical Implications

The practices of verification, comparison and questioning mentioned in the interviews provide some practical ideas on how to present AI-generated cultural information and how to teach youth digital literacy.

First, to improve the accuracy and diversity of cultural information from GenAI platforms, we will add more sources and contexts. Historical and cultural knowledge, local traditions, and group identities often have particular social contexts and cultural experiences, and general answers may not cover them properly. Therefore, platforms can provide more explicit source information and offer all sorts of references to help users verify content that is controversial in terms of history and culture. Ensure that the cultural descriptions in all the languages are consistent and that local cultures are presented appropriately to avoid overgeneralisation and stereotypes.

Culturally, it can be determined whether something is a general trait of people or a variation related to place, age, family, etc. If a topic can be understood in several ways, providing the basis and scope for each kind of understanding can help people distinguish between them. Source cues should help people find related materials and not just make an answer look official. The reasons for the above suggestions are that participants are concerned about accuracy, generalisation and diversity; it will be necessary to further develop the platform and study its use by people to determine its actual effect.

Second, universities should enhance the ability of young people to assess AI-generated cultural information. Platforms for comparing, verifying cultural information in various languages and analysing stories created by artificial intelligence are all good ways for students to learn about the deficiencies of generative AI in the production of culture. Education should also cultivate students' abilities of independent thinking by drawing on historical materials, social experience and all kinds of other sources, so that they can be more active in dealing with complex information in the digital cultural environment.

A typical class activity could have students use various instruments or different languages to ask the same cultural question, observe changes in the focus of the questions, and then verify their own conclusions with related historical and cultural materials. Students can then explain which differences relate to factual errors, which are about presentation, and which are different views. Finally, one could reflect on how one's own life has led to this conclusion. Thus, the problem shifts from whether people can be used to the extent of AI to how to utilise AI for self-learning, creativity, etc.

Finally, the cross-regional cultural exchange initiatives should pay more attention to the different cultural experiences of young people. Although young people in the three areas may have similar problems with AI information, different languages, media, and lives outside the home in these areas can affect how they are understood and responded to. Therefore, the educational initiative and exchange activities should meet the needs of different groups. Inter-regional student exchanges, talks on common cultural issues and comparisons of digital narratives with generative AI are all ways to experience and learn about different local cultures. Young people should also be encouraged to draw on their own lives to judge and discuss cultural works, thus promoting cross-regional cultural literacy and digital literacy.

5.4. Limitations and Future Research

The above are the deficiencies and suggestions for future research in this paper.

First, convenience sampling was employed to select 33 university students from Guangdong, Hong Kong and Macao who were all studying in Shenzhen. Although they are from different regions, they are in the same area and may therefore have a particular educational and daily life environment. Future research can add students from local universities in all three areas and young people of different ages and occupations to the sample to see how widely the results apply in various environments.

Second, the only way to get people's actual experiences of GenAI and their sense of culture was through open-ended interviews. Although these accounts show how young people perceive and react to the risk of cultural information, there may be problems of recall bias and social desirability. The study collected people's stories of their experiences; it did not observe the interaction between people and AI directly, so it could not determine whether the use of AI altered cultural identity. Future research can be carried out in the form of scenario-based experiments, long-term surveys or actual records of people's interaction with AI to determine how different cultural stories created by AI affect people's information judgment, identity negotiation and feelings towards their own culture.

Finally, although this study has examined the differences in language environments, platform ecosystems and cross-regional cultural contact, it has not differentiated among the various levels of cultural identity or observed changes over a long period. In the future, one can distinguish between local cultural identity, identification with Chinese culture, and identification with regional communities, and also explore the roles of AI literacy, cultural openness and the frequency of cross-cultural contact. With the development of GenAI technology and applications, new risks have arisen and young people's response strategies have changed accordingly. Longitudinal studies can observe how people modify their sense of self in light of AI and changes in society over time.

In the future, one will also compare the participants' memories with the specific prompts and responses at the time of cultural information collection. Help to distinguish

between the perceived homogeneity of information and the similarity of generated content, and determine whether modification of wording, language or platform changes the experienced sense. By following the same participants over time, we can determine whether the responses of identity affirmation, identity reconsideration and identity defence are still situational or have become repeated strategies. Therefore, it can be concluded that the evidence at the information level is related to identity, and a short-term response does not necessarily mean that the identity has changed significantly.

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References

[1] Schuetz, S., & Venkatesh, V. (2020). Research perspectives: The rise of human machines: How cognitive computing systems challenge assumptions of user-system interaction. Journal of the Association for Information Systems, 21(2), 460–482. https://doi.org/10.17705/1jais.00608.

[2] Tao, Y., Viberg, O., Baker, R. S., & Kizilcec, R. F. (2024). Cultural bias and cultural alignment of large language models. PNAS Nexus, 3(9), pgae346. https://doi.org/10.1093/pnasnexus/pgae346.

[3] Lu, J. G., Song, L. L., & Zhang, L. D. (2025). Cultural tendencies in generative AI. Nature Human Behaviour, 9(11), 2360–2369. https://doi.org/10.1038/s41562-025-02242-1.

[4] Kitchens, B., Johnson, S. L., & Gray, P. (2020). Understanding echo chambers and filter bubbles: The impact of social media on diversification and partisan shifts in news consumption. MIS Quarterly, 44(4), 1619–1649. https://doi.org/10.25300/MISQ/2020/16371.

[5] Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), The social psychology of intergroup relations (pp. 33–47). Brooks/Cole.

[6] Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. Journal of Counseling Psychology, 54(3), 271–281. https://doi.org/10.1037/0022-0167.54.3.271.

[7] Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. Journal of Adolescent Research, 7(2), 156–176. https://doi.org/10.1177/074355489272003.

[8] Hogg, M. A., Terry, D. J., & White, K. M. (1995). A tale of two theories: A critical comparison of identity theory with social identity theory. Social Psychology Quarterly, 58(4), 255–269. https://doi.org/10.2307/2787127.

[9] Swann, W. B., Jr. (1987). Identity negotiation: Where two roads meet. Journal of Personality and Social Psychology, 53(6), 1038–1051. https://doi.org/10.1037/0022-3514.53.6.1038.

[10] Berry, J. W. (1997). Immigration, acculturation, and adaptation. Applied Psychology: An International Review, 46(1), 5–34. https://doi.org/10.1111/j.1464-0597.1997.tb01087.x.

[11] Sui, J. (2023). Diversidade linguística e cultural na Grande Baía Guangdong-Hong-Kong-Macau: Políticas e perspetivas [Linguistic and cultural diversity in the Guangdong-Hong-Kong-Macau Greater Bay Area: Policies and perspectives]. Études romanes de Brno, 44(2), 323–337. https://doi.org/10.5817/ERB2023-2-20.

[12] Xie, X., Liu, X., & McNay, I. (2023). One country with two systems: The characteristics and development of higher education in the Guangdong–Hong Kong–Macau Greater Bay Area. Humanities and Social Sciences Communications, 10(1), 1–11. https://doi.org/10.1057/s41599-022-01483-z.

[13] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa.

[14] Ji, Z., Lee, N., Frieske, R., Yu, T., Su, D., Xu, Y., Ishii, E., Bang, Y. J., Madotto, A., & Fung, P. (2023). Survey of hallucination in natural language generation. ACM Computing Surveys, 55(12), 248. https://doi.org/10.1145/3571730.

[15] Agarwal, D., Naaman, M., & Vashistha, A. (2025). AI suggestions homogenize writing toward Western styles and diminish cultural nuances. In Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (pp. 1–21). Association for Computing Machinery. https://doi.org/10.1145/3706598.3713564.