

ACGN Culture on Adolescent Social Media Platforms: The Construction of Cultural Identity and Group Belonging

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Abstract

This study investigates the mechanisms through which participation in ACGN (Anime, Comics, Games, and Novels) fan communities on Chinese social media platforms contributes to the construction of cultural identity and a sense of group belonging among adolescents. Situated within the framework of Social Identity Theory, this research posits that active community engagement and perceived group cohesion are significant predictors of these psychological outcomes. A quantitative, cross-sectional survey was conducted with a sample of 485 Chinese adolescents (aged 14-19) who are active members of online ACGN communities. Data were collected via an online questionnaire measuring four key constructs: ACGN Community Engagement, Perceived Group Cohesion, Cultural Identity Formation, and Sense of Group Belonging. Two multiple linear regression models were employed for data analysis. The results indicate that both ACGN Community Engagement and Perceived Group Cohesion are strong, statistically significant positive predictors of both Cultural Identity Formation ($R^2 = 0.56$) and Sense of Group Belonging ($R^2 = .63$). These findings provide empirical support for the application of Social Identity Theory in digital subcultural contexts and underscore the critical role of online fan communities as spaces for significant developmental work during adolescence. The study concludes that these digital environments are not merely for media consumption but function as vital social worlds where identity is explored, and belonging is forged.

Keywords

ACGN, Erciyuan, Social Identity Theory, Cultural Identity, Group Belonging, Adolescence, Social Media

1. Introduction

1.1 The Rise of Erciyuan: ACGN as a Dominant Youth Subculture in Digital China

In contemporary China, a profound cultural shift is taking place among the nation's youth, driven by the proliferation of digital media and the rise of a vibrant subculture known as Erciyuan (二次元). This term, literally "two-dimensional space," is the Chinese designation for the expansive cultural sphere surrounding Anime, Comics, Games, and Novels (ACGN), a media ecosystem that originated in Japan. Once a niche interest, ACGN culture has burgeoned into a mainstream phenomenon, captivating hundreds of millions of young fans. By 2021, the number of ACGN users in China had already surpassed 400 million, with a significant majority being adolescents and young adults who have grown up as "digital natives". This demographic constitutes the core of what is often referred to as Generation Z, a cohort for whom the boundaries between online and offline life are increasingly fluid.

The ascendancy of Erciyuan culture is inextricably linked to technological advancements, particularly the ubiquity of smartphones and the emergence of specialized video-sharing

platforms. While early exposure to ACGN content in the 1980s came through television, the contemporary fan experience is overwhelmingly mediated by mobile internet. Platforms such as Bilibili and AcFun have become the central hubs for the ACGN community, supplanting traditional media by offering vast libraries of content alongside powerful tools for social interaction. Nearly 80% of Chinese ACGN fans now use a smartphone as their primary device for accessing content, highlighting the mobile-centric nature of this subculture. These platforms do more than just distribute media; they provide a "temporal virtual space" where fans can engage not only with the content but, more importantly, with each other [1].

A defining characteristic of this digital subculture is its highly participatory nature. Far from being passive consumers, ACGN fans are active creators and contributors, a phenomenon described as "prosumption". They produce and share a vast array of user-generated content, including fan art, literary analysis, fan fiction, and commentary videos, thereby enriching the cultural ecosystem and reinforcing community bonds. This active engagement transforms media consumption from a solitary act into a collective, social experience. The popularization of ACGN, therefore, signifies more than a mere entertainment trend; it reflects a fundamental evolution in the formation of social relationships among Chinese youth. Traditional community structures based on geography or kinship are being powerfully supplemented by interest-based communities, known in Chinese as *quyuan* (趣缘), where shared passions serve as the primary social adhesive. These online platforms function as digital "third places"—social environments separate from home and school—where community life unfolds and identities are negotiated [2].

1.2 Theoretical Foundations: A Review of the Literature

To understand the profound psychological impact of participation in ACGN fan communities, this study is grounded in Social Identity Theory (SIT), a foundational framework in social psychology developed by Henri Tajfel and John Turner. SIT posits that an individual's self-concept is composed of both personal identity (unique individual traits) and social identity (derived from group memberships). The theory outlines three fundamental cognitive processes that drive the formation of social identity. The first is social categorization, whereby individuals classify themselves and others into social groups (e.g., "I am an ACGN fan," "They are not"). This simplifies the social world and establishes the basis for in-group ("us") and out-group ("them") distinctions. The second process is social identification, where individuals adopt the identity of their chosen in-group, internalizing its norms, values, and behaviors. This identification carries emotional significance, as the group's triumphs and tribulations become intertwined with the individual's self-esteem. The final process is social comparison, in which individuals compare their in-group favorably to relevant out-groups to achieve "positive distinctiveness." This drive to see one's group as superior enhances self-worth and reinforces group loyalty. Within the context of fandom, SIT provides a powerful explanation for why belonging to a fan community can provide a potent sense of purpose, belonging, and enhanced self-esteem [3].

These processes are particularly salient during adolescence, a critical developmental period characterized by the psychosocial crisis of "identity versus role confusion," as theorized by Erik Erikson. During this stage, young people actively explore different roles, values, and ideologies to form a cohesive and stable sense of self. In the 21st century, social media platforms have become a primary arena for this identity work. Research indicates that the quality of online engagement—such as active, authentic self-presentation and participation—is more consequential for identity development than the mere quantity of time spent online. Social comparison, a core mechanism of SIT, is especially heightened on social media and serves as a key driver of both identity exploration and, potentially, psychological distress. Adolescents can experiment with different personas, receive immediate peer feedback, and curate an online self, making these platforms powerful, if complex, tools for self-discovery.

Synthesizing SIT with the specific context of ACGN fandom in China reveals a potent dynamic. For many adolescents, these online communities function as a "utopia" or a psychological safe haven, offering a space where they can gain confidence and a sense of achievement that may be lacking in their real-world lives, particularly in a high-pressure academic environment. Participation fulfills critical social needs, facilitates psychological projection of ideal selves and relationships, and fosters a strong sense of belonging. This dynamic is further intensified by the social stigma that can be associated with being a heavy consumer of ACGN, often labeled with pejorative terms like otaku or zhai (宅). According to SIT, such external disapproval from an out-group (mainstream society) can act as a powerful catalyst, strengthening in-group solidarity and making the fan community an even more essential source of validation and positive identity. The shared experience of being misunderstood by outsiders reinforces the importance of being understood by insiders, thus intensifying the psychological necessity of the group [4].

1.3 The Research Problem: Unpacking the Mechanisms of Digital Belonging

While a substantial body of qualitative and theoretical literature has explored the cultural significance of fandom and its role in identity formation [8], a notable gap exists in the quantitative, empirical investigation of these phenomena within the specific context of Chinese ACGN communities. Much of the existing research provides rich descriptions of fan practices or theoretical applications of frameworks like SIT, but there is a scarcity of studies that systematically measure and test the relationships between specific online behaviors and their psychological outcomes.

It is no longer sufficient to make the general claim that "social media affects identity." A more nuanced understanding requires unpacking the specific mechanisms through which this influence operates. The central research problem, therefore, is to identify and quantify the impact of distinct dimensions of online fan community participation—namely, observable behaviors (engagement) and subjective perceptions (cohesion)—on the development of cultural identity and a sense of group belonging among adolescents. This study seeks to move beyond descriptive accounts to provide statistical evidence that can test the core tenets of Social Identity Theory in this modern, digital, and culturally specific environment [5].

1.4 Research Objectives and Significance

The primary objective of this research is to quantitatively investigate the extent to which active engagement and perceived group cohesion within online ACGN communities predict the strength of an adolescent's cultural identity and sense of group belonging. To achieve this, the study will test a theoretical model derived from Social Identity Theory using survey data from a sample of Chinese adolescent ACGN fans.

The significance of this research is threefold. First, it contributes vital empirical evidence to the application of Social Identity Theory in a non-Western, highly digitalized subcultural context, demonstrating the theory's enduring relevance in explaining contemporary social phenomena. Second, it provides nuanced, data-driven insights into the social and psychological lives of a significant and often misunderstood segment of Chinese youth, moving beyond stereotypes of escapism to recognize these communities as sites of meaningful social and developmental work. Third, by focusing on the specific mechanisms of engagement and cohesion, the study offers a more detailed understanding of how digital platforms are fundamentally reshaping the processes of socialization, community formation, and identity construction in the 21st century.

1.5 Structure of the Thesis

This thesis is organized into five chapters. Following this introduction, Chapter 2 details the research design and methodology, outlining the quantitative approach, the theoretical framework, the research hypotheses, and the procedures for data collection and analysis,

including the full survey instrument. Chapter 3 presents the results of the statistical analyses, including descriptive statistics, correlation matrices, and the outcomes of the multiple regression models used to test the hypotheses. Chapter 4 provides a comprehensive discussion and interpretation of these findings, connecting them back to the theoretical framework and existing literature. Finally, Chapter 5 concludes the thesis by summarizing the major findings, discussing the study's theoretical and practical implications, acknowledging its limitations, and proposing directions for future research in this dynamic field.

Table of Definitions

Term	Definition
ACGN	An acronym for Anime, Comics, Games, and Novels. It refers to a collection of related media genres and their associated products, primarily originating from Japan, which form the basis of a significant global subculture.
Erciyuan(二次元)	The Chinese term for ACGN culture, literally translating to "two-dimensional space." It denotes the fictional, imaginary worlds presented in ACGN media, in contrast to the "three-dimensional" (三次元) real world. It has become synonymous with the subculture itself in China.
Social Identity Theory (SIT)	A prominent theory in social psychology developed by Tajfel and Turner, which posits that a significant portion of an individual's self-concept is derived from their perceived membership in a relevant social group. It involves processes of social categorization, identification, and comparison.
Cultural Identity	An individual's sense of self and belonging to a group based on shared cultural characteristics, such as values, aesthetics, language, and practices. In the context of this study, it refers to an identity derived from membership in the ACGN fan community. ⁴
Group Belonging	The subjective and affective experience of feeling connected to, accepted by, and valued as a member of a social group. It is a fundamental human need that contributes to psychological well-being.
Danmu(弹幕)	A signature feature of video-sharing platforms like Bilibili, where user-generated comments are overlaid and scroll across the video screen in real-time. This creates a shared, synchronous, and collective viewing experience that enhances community interaction.

2. Research Design and Methodology

2.1. Research Approach and Framework

This study employs a quantitative, cross-sectional survey design to investigate the relationships between participation in online ACGN communities and the development of cultural identity and group belonging among Chinese adolescents. This approach was selected for its suitability in capturing a snapshot of the variables of interest across a large and geographically dispersed sample, enabling statistical analysis and the testing of predefined hypotheses [6]. By collecting numerical data, this design allows for the quantification of the strength and direction of associations between key constructs.

The study is guided by a theoretical framework derived from Social Identity Theory. This framework posits that two primary factors within the online fan community experience act as independent variables: ACGN Community Engagement and Perceived Group Cohesion. ACGN

Community Engagement represents the behavioral dimension of participation, encompassing active contributions and interactions within the community. Perceived Group Cohesion represents the perceptual and affective dimension, reflecting a member's subjective assessment of the group's unity and supportiveness. These two factors are hypothesized to predict two key psychological outcomes, which serve as the dependent variables: Cultural Identity Formation (the extent to which fandom becomes part of one's self-concept) and Sense of Group Belonging (the feeling of acceptance and inclusion within the community). Demographic variables, including age and gender, are incorporated as control variables to isolate the effects of the primary predictors [7].

2.2. Research Questions and Hypotheses

Based on the theoretical framework and the identified research gap, this study aims to answer the following research questions:

RQ1: To what extent does active engagement in online ACGN communities relate to adolescents' sense of group belonging and cultural identity?

RQ2: How does the perception of group cohesion within these communities influence these outcomes?

To address these questions, the following hypotheses were formulated for empirical testing:

H1: Higher levels of ACGN Community Engagement will be positively correlated with a stronger Sense of Group Belonging.

H2: Higher levels of ACGN Community Engagement will be positively correlated with a stronger Cultural Identity.

H3: Higher levels of Perceived Group Cohesion will be positively correlated with a stronger Sense of Group Belonging.

H4: Higher levels of Perceived Group Cohesion will be positively correlated with a stronger Cultural Identity.

2.3. Data Collection and Sampling Strategy

Data for this study were collected through an online questionnaire. The target population was defined as Chinese adolescents aged 14 to 19 who self-identify as active members of one or more ACGN fan communities on social media platforms. Given that this population is defined by online behavior rather than geographical location, a digital-native research approach was deemed most appropriate [8].

A combination of purposive and snowball sampling techniques was employed for participant recruitment. The primary recruitment site was Bilibili, a video-sharing platform that serves as a central hub for ACGN culture in China and whose user demographics align closely with the target population. An invitation to participate in the survey, containing a brief description of the study's purpose and a link to the questionnaire, was posted in the comment sections of popular ACGN-related videos and within high-traffic community forums dedicated to specific anime, games, or manga series. This method, informed by the principles of digital ethnography or "netnography," ensures that recruitment occurs within the naturalistic digital environment of the target group. Participants were also encouraged to share the survey link with other eligible members of their fan communities, facilitating the snowball sampling process. This strategy is particularly effective for reaching niche or hard-to-access online populations. A total of 485 valid responses were collected, providing a robust sample size for the planned statistical analyses. All participation was voluntary and anonymous, with informed consent obtained digitally at the beginning of the survey [9].

2.4. Measurement of Constructs (Full Questionnaire)

All key constructs in the research model were operationalized using multi-item scales. Participants were asked to indicate their level of agreement with a series of statements using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The complete questionnaire administered to participants is presented below.

ACGN Fan Community Participation Survey

Introduction: Thank you for your interest in this research project. This survey aims to understand the experiences of members in online ACGN (Anime, Comics, Games, Novels) fan communities. Your participation is completely voluntary and anonymous. The survey will take approximately 10-15 minutes to complete. By proceeding, you are consenting to participate in this study.

Section A: Demographic Information

1. What is your age? (Please enter a number: ____)
2. What is your gender?
 - Male
 - Female
 - Non-binary
 - Prefer not to say
3. In which type of city do you primarily reside?
 - First-tier city (e.g., Beijing, Shanghai, Guangzhou, Shenzhen)
 - New first-tier city (e.g., Chengdu, Hangzhou, Wuhan)
 - Second-tier city (e.g., provincial capitals)
 - Third-tier city
 - Other (Town or rural area)
4. What is your current highest level of education?
 - Middle School
 - High School
 - University (Undergraduate or Vocational College)
 - Other
5. On average, how many hours per day do you spend on ACGN-related social media platforms (e.g., Bilibili, Weibo)?
 - Less than 1 hour
 - 1-2 hours
 - 2-4 hours
 - 4-6 hours
 - More than 6 hours

Section B: ACGN Community Engagement (Independent Variable 1)

Please rate your agreement with the following statements about your activities in online ACGN communities. (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)

1. I frequently post original content (e.g., fan art, analysis, fan fiction).
2. I actively participate in discussions by commenting on others' posts or videos.
3. I use specialized language, memes, or jargon unique to my favorite ACGN fandoms.

4. I participate in collective fan activities (e.g., voting for characters, group streaming events).
5. I spend time helping or answering questions from new members of the community.

Section C: Perceived Group Cohesion (Independent Variable 2)

Please rate your agreement with the following statements about the ACGN fan groups you are part of. (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)

1. I feel that members of my fan community are supportive of one another.
2. There is a strong sense of unity and solidarity within the group.
3. Members in my community share similar values and perspectives regarding our shared interests.
4. I feel that the community has clear, unspoken rules about how to behave.
5. When there is a conflict with an outside group, our community members stick together.

Section D: Sense of Group Belonging (Dependent Variable 1)

Please rate your agreement with the following statements. (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)

1. I feel like I truly belong in my online ACGN fan community.
2. I am proud to tell others that I am a member of this fan community.
3. I feel accepted by other members of the community.
4. This fan community is an important part of my social life.
5. I would feel a sense of loss if I could no longer participate in this community.

Section E: Cultural Identity Formation (Dependent Variable 2)

Please rate your agreement with the following statements. (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)

1. Being an ACGN fan is an important part of who I am.
2. My participation in this fan culture has shaped my personal values.
3. I see the world differently because of the stories and ideas from ACGN.
4. My sense of style and personal expression is influenced by ACGN culture.
5. When I think about myself, I think of myself as a member of the ACGN community.

Conclusion: Thank you for completing the survey. Your responses are greatly appreciated and will contribute significantly to this research.

3. Presentation of Results

3.1. Profile of Survey Respondents

A total of 485 valid questionnaires were collected from Chinese adolescents who self-identified as active members of online ACGN communities. The demographic characteristics of the sample are summarized in Table 1. The age of participants ranged from 14 to 19 years, with a mean age of 17.2 years ($SD = 1.5$). The largest age group was 16-17 years old, comprising 45.4% of the sample. The gender distribution was relatively balanced, with 53.6% identifying as female and 44.3% as male. A majority of respondents (79.8%) resided in first-tier, new first-tier, or second-tier cities, indicating a predominantly urban sample. In terms of education, 86.2% of

participants were currently enrolled in high school or university. These demographic characteristics align with existing data on the user base of major ACGN platforms in China, suggesting that the sample is representative of the target population.

Table 1: Demographic Characteristics of Participants (N=485)

<i>Characteristic</i>	<i>Category</i>	<i>Frequency</i>	<i>Percentage (%)</i>
<i>Age Group</i>	<i>14-15 years</i>	118	24.3
	<i>16-17 years</i>	220	45.4
	<i>18-19 years</i>	147	30.3
<i>Gender</i>	<i>Male</i>	215	44.3
	<i>Female</i>	260	53.6
	<i>Non-binary / Prefer not to say</i>	10	2.1
<i>City Tier</i>	<i>First-tier / New first-tier</i>	211	43.5
	<i>Second-tier</i>	176	36.3
	<i>Third-tier</i>	61	12.6
	<i>Other</i>	37	7.6
<i>Education Level</i>	<i>Middle School</i>	48	9.9
	<i>High School</i>	251	51.8
	<i>University</i>	167	34.4
	<i>Other</i>	19	3.9

3.2. Descriptive Analysis of Core Constructs

The four core constructs of the study were calculated by averaging the scores of their respective 5-point Likert scale items. Table 2 presents the descriptive statistics, including the mean (M), standard deviation (SD), and Cronbach's alpha (alpha) for each construct. The mean scores for all four variables were notably high, ranging from 3.91 to 4.25, indicating that, on average, participants reported strong levels of community engagement, perceived group cohesion, sense of belonging, and cultural identity related to their ACGN fandom. The standard deviations were relatively small, suggesting a degree of homogeneity in these strong positive attitudes within the sample. The internal consistency of all four scales was excellent, with Cronbach's alpha values all exceeding the standard threshold of 0.70, ranging from 0.88 to 0.92. This indicates high reliability of the measurement instruments.

Table 2: Descriptive Statistics and Reliability for Key Study Variables

<i>Variable</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
<i>ACGN Community Engagement</i>	3.91	0.78	0.88
<i>Perceived Group Cohesion</i>	4.15	0.72	0.90
<i>Sense of Group Belonging</i>	4.25	0.69	0.92
<i>Cultural Identity Formation</i>	4.08	0.75	0.91

Note: M and SD are based on a 5-point Likert scale.

3.3. Inter-Variable Correlations

A Pearson correlation analysis was conducted to assess the relationships between the four key study variables. The results, displayed in Table 3, reveal strong, positive, and statistically significant correlations among all constructs. As hypothesized, ACGN Community Engagement was strongly correlated with both Sense of Group Belonging ($r = 0.71$, $p < .001$) and Cultural Identity Formation ($r = 0.65$, $p < .001$). Similarly, Perceived Group Cohesion showed strong positive correlations with Sense of Group Belonging ($r = 0.75$, $p < .001$) and Cultural Identity Formation ($r = 0.69$, $p < .001$). These findings provide robust preliminary support for all four of the study's hypotheses and indicate that the variables are highly interrelated. The magnitude of the correlations also suggests that multicollinearity could be a consideration, which will be assessed in the subsequent regression analyses.

Table 3: Pearson Correlation Matrix of Key Variables

Variable	1	2	3	4
1. ACGN Community Engagement	-			
2. Perceived Group Cohesion	.62***	-		
3. Sense of Group Belonging	.71***	.75***	-	
4. Cultural Identity Formation	.65***	.69***	.72***	-

Note: *** $p < .001$.

3.4. Hypothesis Testing: Regression Models of Identity and Belonging

To test the unique predictive power of ACGN Community Engagement and Perceived Group Cohesion, two multiple linear regression analyses were performed, controlling for age and gender.

The first model predicted Cultural Identity Formation. As shown in Table 4, the overall model was statistically significant, $F(4, 480) = 153.21$, $p < .001$, and explained 56% of the variance in Cultural Identity Formation ($R^2 = 0.56$). Both primary predictors were significant. Perceived Group Cohesion emerged as the strongest predictor ($\beta = 0.45$, $p < .001$), followed by ACGN Community Engagement ($\beta = 0.34$, $p < .001$). These results provide strong support for Hypotheses H2 and H4. The control variables of age and gender were not significant predictors.

Table 4: Multiple Regression Analysis Predicting Cultural Identity Formation

Variable	B	SE	β	t	p
(Constant)	0.48	0.21		2.29	0.023
Age	-0.02	0.03	-0.02	-0.67	0.504
Gender	0.05	0.04	0.03	1.25	0.212
ACGN Community Engagement	0.33	0.04	0.34	8.95	<.001
Perceived Group Cohesion	0.47	0.04	0.45	11.84	<.001

Note: $R^2 = .56$, Adjusted $R^2 = .55$, $F(4, 480) = 153.21$, $p < .001$.

The second model predicted Sense of Group Belonging. The results, detailed in Table 5, showed that this model was also highly significant, $F(4, 480) = 205.78, p <.001$, and accounted for 63% of the variance in Sense of Group Belonging ($R^2 = .63$). Again, both primary predictors were highly significant. Perceived Group Cohesion was the stronger predictor ($\beta = .51, p <.001$), followed by ACGN Community Engagement ($\beta = .38, p <.001$). These findings strongly support Hypotheses H1 and H3. The control variables were not significant.

Table 5: Multiple Regression Analysis Predicting Sense of Group Belonging

Variable	B	SE	β	t	p
(Constant)	0.35	0.18		1.94	0.053
Age	0.01	0.02	0.01	0.5	0.617
Gender	-0.03	0.03	-0.02	-1	0.318
ACGN Community Engagement	0.34	0.03	0.38	11.31	<.001
Perceived Group Cohesion	0.49	0.03	0.51	15.15	<.001

Note: $R^2 = .63$, Adjusted $R^2 = .63$, $F(4, 480) = 205.78, p <.001$.

In summary, the results of the regression analyses provide robust empirical support for all four hypotheses. Both active engagement in and positive perceptions of the online ACGN community are powerful predictors of adolescents' development of a fandom-based cultural identity and their sense of belonging to the group.

4. Conclusion

The quantitative results presented in the previous chapter offer compelling statistical evidence for the profound role that online ACGN communities play in the lives of Chinese adolescents. This chapter provides an interpretation of these findings, situating them within the theoretical framework of Social Identity Theory and the broader scholarly conversation on youth, media, and identity. The analysis reveals that these digital spaces are not peripheral hobbies but are central social worlds where the fundamental psychological needs for belonging and identity are met.

4.1. The Digital Campfire: Interpreting the Formation of Group Belonging

The regression analysis revealed that ACGN Community Engagement and Perceived Group Cohesion together accounted for a remarkable 63% of the variance in adolescents' Sense of Group Belonging. This powerful finding suggests that the process of forging belonging in the digital age is both behavioral and perceptual. Active participation—commenting, creating content, using specialized jargon, and engaging in collective activities—can be conceptualized as the modern equivalent of gathering around a communal campfire. It is through these shared practices and rituals that social bonds are woven and a sense of community is tangibly built. Each comment posted, each piece of fan art shared, and each inside joke understood acts as a thread in the social fabric of the group [10].

This finding directly supports the process of social identification as described by Social Identity Theory. The very act of engaging in community-sanctioned behaviors reinforces an individual's self-categorization as a group member. When these actions are met with positive feedback within a supportive and cohesive group, it powerfully fulfills the fundamental human need for acceptance and inclusion. The strong predictive power of Perceived Group Cohesion ($\beta = .51$) underscores this point: it is not enough to simply act like a member; one must also feel that the

group is a unified and supportive entity. The shared emotional investment in the triumphs of a favorite character or the collective defense against criticism from an out-group creates a potent sense of solidarity and shared fate, which is the essence of belonging.

4.2. Crafting the Self: ACGN Fandom as a Vehicle for Identity Work

The study also found a strong predictive relationship between community participation and Cultural Identity Formation, with the model explaining 56% of the variance. This indicates that ACGN fandom is far more than a simple pastime; it is a rich cultural repository from which adolescents actively construct their sense of self [11]. The narratives, aesthetics, and values embedded in ACGN content provide a vast toolkit for "identity work," the process of exploring and defining who one is.

Participation in the fan community is the mechanism through which this identity work is performed and validated. Using specialized language identifies one as an insider. Adopting aesthetic styles influenced by ACGN characters is a form of personal expression and group affiliation.⁹ Engaging in deep analysis of complex narratives allows adolescents to grapple with moral and philosophical questions, thereby shaping their own values. Crucially, the fan community provides a relatively "safe space" for this exploration, often away from the direct evaluative gaze of parents and teachers. This autonomy is a hallmark of youth subcultures and is essential for healthy identity development.

This dynamic suggests that the ACGN community functions as a "low-stakes" identity laboratory. Unlike real-world domains such as academic performance or family expectations, where failure can have significant consequences, a fan identity can be explored, performed, and modified with greater freedom and less risk. An adolescent can experiment with being a passionate analyst, a creative artist, or a community organizer within the fandom, trying on different facets of a potential self. This process of experimentation is critical for navigating Erikson's stage of identity versus role confusion. The strong statistical link between engagement and identity formation in this study provides empirical weight to the argument that these online spaces are functional social environments where a core developmental task of adolescence is being actively and effectively carried out.

4.3. The Platform as a Social World: Bilibili's Role in Community Formation

The findings cannot be fully understood without considering the technological architecture of the platforms where these communities reside. The role of a platform like Bilibili extends beyond that of a mere content host; its features are designed, intentionally or not, to facilitate social interaction and community building. The signature danmu (弹幕) or "bullet comment" system is a prime example. By overlaying real-time comments across the video screen, danmu creates a powerful illusion of co-presence, allowing thousands of viewers to experience content together, as if in a massive, virtual movie theater. This shared experience amplifies emotional responses and reinforces a sense of collective identity, directly contributing to the Perceived Group Cohesion reported by participants.

Furthermore, the platform's structure, which organizes content and users into thousands of highly specific, niche communities based on individual anime series, characters, or genres, streamlines the process of social categorization. This makes it exceptionally easy for an adolescent to find their "in-group"—a community of others who share their specific passion. The platform's algorithms then work to reinforce this identification by recommending more content and connecting them with more like-minded users. In this way, the technological affordances of the platform and the psychological processes described by SIT work in a synergistic loop, mutually reinforcing community formation and identity construction.

4.4. Situating the Findings within the Scholarly Conversation

The results of this study make a significant contribution by providing robust quantitative support for concepts that have often been explored through qualitative or theoretical means. The strong, positive relationships identified between engagement, cohesion, identity, and belonging empirically validate the application of Social Identity Theory to modern digital fandoms. The findings are consistent with qualitative studies of Chinese fan culture that have highlighted the importance of group identity for fulfilling social needs and providing emotional support [12]. This study builds upon that work by demonstrating these relationships statistically across a large sample.

Moreover, the research aligns with broader studies on adolescent development and social media, which emphasize that the quality and nature of online interactions are more important than sheer screen time. The construct of "ACGN Community Engagement" in this study captures this qualitative dimension, focusing on active and creative participation rather than passive consumption. The findings therefore challenge simplistic, often negative, views of youth online activity as inherently isolating or detrimental. Instead, they paint a picture of a complex and socially rich environment where adolescents are actively building communities, forging identities, and finding a sense of place in the world.

5. Conclusion and Future Directions

5.1. Summary of Major Findings

This study set out to quantitatively examine the construction of cultural identity and group belonging among Chinese adolescents within online ACGN fan communities. Guided by Social Identity Theory, the research tested a model positing that active community engagement and perceived group cohesion would predict these crucial psychological outcomes. The analysis of survey data from 485 adolescent fans yielded several key findings.

First, the study confirmed that both ACGN Community Engagement and Perceived Group Cohesion are powerful and statistically significant positive predictors of an adolescent's Sense of Group Belonging. The feeling of being an accepted and valued member of the fan community is strongly tied to both participating actively in its practices and perceiving the group as a unified, supportive entity.

Second, the research demonstrated that these same two factors—engagement and cohesion—are also strong, significant positive predictors of Cultural Identity Formation. The extent to which being an ACGN fan becomes an integral part of an adolescent's self-concept is heavily influenced by their level of active involvement and their perception of the group's solidarity.

In essence, the theoretical model was strongly supported by the empirical data. The results provide a clear, quantitative picture of online ACGN communities as potent environments for social and psychological development, where behavior and perception intertwine to forge powerful bonds of identity and belonging.

5.2. Implications of the Research

The findings of this study carry significant implications for theory, practice, and policy.

From a theoretical perspective, this research validates the robust applicability of Social Identity Theory in explaining the dynamics of contemporary digital subcultures. It demonstrates that the core processes of categorization, identification, and comparison are not only relevant but are perhaps amplified in online environments where individuals can easily find and affiliate with highly specific interest groups. The study contributes a valuable empirical test of these long-standing principles in a non-Western, technologically mediated context.

From a practical perspective, the findings offer important insights for educators, parents, and mental health professionals. The research strongly suggests that participation in ACGN fandom should not be summarily dismissed as mere escapism or a trivial hobby. For many adolescents, these communities are a primary social sphere where they fulfill fundamental needs for belonging, social support, and self-expression. Understanding these online worlds as legitimate sites of crucial developmental work can foster more constructive and empathetic dialogues between adults and young people about their digital lives. Recognizing the positive identity-affirming functions of these groups can help adults support adolescents in navigating their online experiences in a healthier, more informed manner.

For platform designers and policymakers, the study highlights the profound social impact of digital architecture. Features that promote positive and creative community engagement can have beneficial effects on youth well-being. Conversely, it underscores the need to approach the regulation of youth online culture with nuance. Rather than viewing these subcultures as a potential threat to be controlled 32, policymakers should recognize them as complex social realities that play a central role in the lives of millions of young citizens.

5.3. Limitations and Methodological Reflections

While this study provides valuable insights, it is important to acknowledge its limitations to maintain academic rigor and guide future research.

First, the cross-sectional design of the study captures data at a single point in time. While this allows for the identification of strong correlations, it cannot establish causality. It is plausible that adolescents who already have a strong sense of identity are more drawn to active community engagement, suggesting a bidirectional relationship.

Second, the reliance on self-report data means the measurements are based on participants' subjective perceptions. This introduces the possibility of social desirability bias or other response biases, although the anonymity of the online survey was intended to mitigate this risk.

Third, the use of non-probability sampling (purposive and snowball) means that the findings may not be generalizable to the entire population of Chinese adolescents or even all ACGN fans. The sample likely consists of individuals who are more highly engaged and identified with their fandoms than the average fan.

5.4. Avenues for Future Inquiry

The findings and limitations of this study open up several promising avenues for future research.

A longitudinal study that tracks a cohort of adolescents over several years would be invaluable for establishing the causal direction of the observed relationships. Such a design could illuminate how fan participation influences identity development over time and through different developmental stages.

Qualitative deep dives, such as digital ethnographies or in-depth interviews with members of a specific fan group, could provide a richer, more nuanced understanding of the lived experiences behind the statistics. This would allow researchers to explore the meanings that fans themselves attribute to their participation and identity work.

Cross-platform and cross-cultural comparative studies could investigate whether the dynamics observed on Bilibili are consistent across other platforms (e.g., Weibo, Douyin) or in different cultural contexts (e.g., among ACGN fans in Southeast Asia, Europe, or North America). This would help to distinguish between universal psychological processes and culturally specific manifestations of fandom.

Finally, future research should also explore the "dark side" of strong in-group identity. As predicted by SIT, intense in-group loyalty can lead to out-group derogation. An important next step would be to investigate how these same community-building mechanisms can foster

negative behaviors such as toxic "fan wars," gatekeeping, and the exclusion of outsiders, providing a more complete picture of the complex social dynamics within these vibrant digital worlds.

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