# THE IMPACT OF SOCIAL MEDIA ON ANIMATION CREATIVITY THROUGH INTRINSIC MOTIVATION AMONG UNIVERSITY STUDENTS IN JIANGSU PROVINCE, CHINA

## **WANG LEI**

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# THE IMPACT OF SOCIAL MEDIA ON ANIMATION CREATIVITY THROUGH INTRINSIC MOTIVATION AMONG UNIVERSITY STUDENTS IN JIANGSU PROVINCE, CHINA

by

## **WANG LEI**

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### LIST OF SYMBOLS

Bilibili The Name of Social Media in China

 $f^2$  Effect Size

M Mean

*p*-value Probability Statistics

 $Q^2$  Predictive Relevance

Rho\_a Composite Reliability (rho\_a)

 $R^2$  Coefficient of Determination

*t*-value Test Statistics

 $\beta$  Std. beta

#### LIST OF ABBREVIATIONS

ACG Animation, Comics, and Games

CNNIC China Internet Network Information Centre

ECAR Educause Center for Applied Research

GIM Gradual Immersion Method

ICEC International Conference on Entertainment Computing

JEPeM Jawatankuasa Etika Penyelidikan Manusia

MAXQDA Max Qualitative and Quantitative Data Analysis

PUGC Produced User-Generated Content

PUGV Professional User-Generated Videos

PLS Partial Least Square

Q&A Question and Answer

SM Social Media

SNSs Social Networking Sites

S-O-R Stimulus-Organism-Response

SPSS Statistical Package for Social Sciences (Software)

STEAM Science, Technology, Engineering, Arts and Mathematics

TTCT Torrance Tests of Creative Thinking

USM Universiti Sains Malaysia

WJX Wenjuanxing (Software)

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# KESAN MEDIA SOSIAL TERHADAP KREATIVITI ANIMASI MELALUI MOTIVASI INTRINSIK DALAM KALANGAN PELAJAR UNIVERSITI DI WILAYAH JIANGSU, CHINA

#### **ABSTRAK**

Media sosial telah muncul sebagai medium komunikasi yang berkuasa di seluruh dunia dan penggunaannya yang meluas telah mengubah cara, orang ramai berkomunikasi dan berinteraksi dalam talian. Kita telah mencapai tahap di mana alat ini tidak lagi menjadi pilihan tetapi sebaliknya merupakan komponen penting dalam kepimpinan sekolah abad ke-21 yang berkesan. Dalam tahun-tahun kebelakangan ini, bidang pendidikan telah memberi perhatian yang besar kepada prestasi kreativiti, dan minat terhadap kreativiti terus berkembang. Pada masa yang sama, kajian telah menunjukkan bahawa kemahiran berfikir kreatif yang diperlukan oleh pelajar animasi semakin berkurangan. Dapat dilihat bahawa perhatian orang ramai terhadap media sosial telah meningkat, manakala kreativiti pelajar telah merosot. Kajian awal telah menunjukkan bahawa media sosial mempunyai kesan ke atas kreativiti pelajar, dan motivasi intrinsik memainkan peranan penting di dalamnya. Penyelidikan ini menggabungkan teori Stimulus-Organism-Respons (S-O-R). Pelajar mendapat rangsangan (S) dalam bentuk pendedahan kepada media sosial, melibatkan motivasi kreatif pelajar mempengaruhi organisma pelajar (O), dan kreativiti pelajar dihasilkan sebagai tindak balas (R). Ia mewujudkan rangka kerja teori untuk pengaruh media sosial terhadap kreativiti pelajar di bawah pengaruh motivasi intrinsik, dan kemudian melengkapkan pembangunan hipotesis. Kajian ini juga mengukur hubungan antara media sosial, motivasi intrinsik, dan kreativiti pelajar, serta kesan pengaruh. Kajian ini menggunakan kajian kuantitatif yang diukur melalui kajian tinjauan dan kaedah kuasi eksperimen. Penyelidikan mendapati media sosial memberi kesan positif terhadap motivasi intrinsik, dan motivasi intrinsik memberi kesan positif terhadap kreativiti pelajar, manakala media sosial tidak boleh memberi kesan langsung kepada kreativiti pelajar. Motivasi intrinsik memainkan peranan pengantara penuh dalam kesan media sosial terhadap kreativiti pelajar. Pada masa yang sama, kajian ini mengesahkan peranan mengukur Torrance Test of Creative Thinking dalam meningkatkan kreativiti pelajar universiti dalam jurusan animasi. Pada masa yang sama, kajian ini mengesahkan peranan mengukur Torrance Test of Creative Thinking dalam meningkatkan kreativiti pelajar universiti dalam jurusan animasi. Melalui analisis dan paparan keputusan, penyelidikan ini dapat mempromosikan penciptaan pelajar kolej dan meningkatkan keupayaan kreatif mereka. Kesimpulan kajian ini menunjukkan bahawa media sosial meningkatkan kreativiti pelajar di bawah pengaruh motivasi intrinsik. Motivasi intrinsik ialah pengantaraan penuh antara media sosial dan kreativiti pelajar.

# THE IMPACT OF SOCIAL MEDIA ON ANIMATION CREATIVITY THROUGH INTRINSIC MOTIVATION AMONG UNIVERSITY STUDENTS IN JIANGSU PROVINCE, CHINA

#### **ABSTRACT**

Social media has emerged as a powerful medium of communication across the globe, and its extensive use has changed the way people communicate and interact online. We have reached the point where these tools are no longer optional but instead integral components of effective 21st-century school leadership. In recent years, interest in creativity has grown as the field of education has placed greater emphasis on the expression of creativity. Meanwhile, studies have shown that the creative thinking skills required by animation students are declining. It can be seen that attention on social media has increased while students' creativity has decreased. Preliminary research has shown that social media has an impact on students' creativity, and intrinsic motivation plays an important role in it. The study combines the theory of stimulus-organization-response (S-O-R). Students receive stimulation (S) in the form of exposure to social media, and as organisms (O), this stimulation affects their creative motivation, resulting in responses (R) that affect students' creativity. In the study, a theoretical framework for the impact of social media on students' creativity under the influence of intrinsic motivation was established, and the development of hypotheses was completed. The study also measures the relationship among social media, intrinsic motivation, and students' creativity, as well as influence effects. The research used quantitative research measured by survey research and quasiexperimental methods. Research has found that social media has a positive impact on intrinsic motivation, and intrinsic motivation has a positive impact on student creativity, while social media cannot have a direct impact on student creativity. Intrinsic motivation plays a full mediating role in the impact of social media on student creativity. Meanwhile, the study verified the measuring role of the Torrance Test of Creative Thinking in improving the creativity of university students majoring in animation. The study verified the measuring role of the Torrance Test of Creative Thinking in improving the creativity of university students majoring in animation. Through the analysis and display of the results, the research can promote the creation of college students and improve their creative abilities. The conclusion of this study shows that social media improves students' creativity under the influence of intrinsic motivation. Intrinsic motivation is the full mediation between social media and students' creativity.

#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 Introduction

The mobile internet has served as a catalyst for the development of social media into a powerful global medium and has radically altered the way people communicate and interact online. In China, video social media sites such as TikTok, Kuaishou, and Bilibili are growing rapidly. Each platform has unique characteristics and user groups. Among them, Bilibili is highly popular among young people for its unique real-time interaction and barrage culture.

Social media has become an integral part of student life and has also had a positive impact on higher education by stimulating the creativity of college students. With the development of higher education in China, art education has expanded into a wider range of fields. Art college students, in particular, require unique creativity because of the nature of their majors. The advantages of social media have become an important student's creativity booster by stimulating their intrinsic motivation through art teaching methods.

This chapter provided comprehensive information about the study background and problem statement. It also presents the research questions, research objectives, study significance, study scope, and explanations of the concepts most relevant to this study. Overall, this chapter outlines the structure of the thesis.

#### 1.2 Study Background

# 1.2.1 The Promoting Effect of Mobile Internet on the Development of Social Media

The Internet has become a major source of information all around the world. Asia, which accounts for 50.7% of all Internet users, is the most popular region (Amanda, 2020). Internet users throughout the world have an average of 8.5 social media accounts; they spend around 2 hours daily on social networking sites and typically utilise each platform for distinct purposes (Bayindir & Kavanagh, 2018). In the era of rapidly developing mobile Internet, social media platforms have become the hotspot of social attention (Anser et al. 2020). It follows that their use is seeing rapid expansion.

Despite the fact that different countries favour different popular social media sites, the reasons people use them remain largely the same worldwide (Chen et al., 2019). Kumar and Nanda (2020) found social media to be a powerful global medium. It has become a widely used platform while also changing the way people communicate and interact online.

The phenomenon of social media began around 2005 after the advent of Web 2.0, defined as "a set of Internet-based applications that build on the ideological and technical foundations of Web 2.0 and allow the creation and exchange of usergenerated content." (Kaplan & Haenlein, 2010). Akinwale et al. (2020) found that social media has become an important source of information and ideas all over the world. A study of social media usage in 40 countries shows a surge in social media use, including in emerging countries with increasing Internet penetration (Pew

Research Centre, 2016). This digitization has changed the way people communicate, entertain, read, learn, share information, and organise activities.

Internationally, Facebook and YouTube are the most visited professional and result-oriented websites (Ansari & Khan, 2020). Social media is a new form of electronic communication, including social networks and microblogging. It allows users to create online communication channels to share information, ideas, and other content. Despite many types of social media, they are mainly classified by specific functions, such as micro-blogging (such as Twitter), social networks (such as Facebook), the generation and sharing of collaborative knowledge (such as Wikipedia), media sharing (such as YouTube), and participating in comments and opinions. Among these various types, Chinese users are particularly interested in sharing on social media, which will be discussed further below.

#### 1.2.2 The Rise of Video Social Media in China

Among social media platforms, online videos have received much attention. As of June 2021, there were 944 million online video users in China, an increase of 17.07 million since December 2020, making up 93.4% of all netizens, according to the 48th "Statistical Report on China's Internet Development Status" published by the China Internet Information Centre (CNNIC) (Statistical Report on Internet Development in China, Aug. 2021). In the era of media convergence, multiple social media platforms have been established, and their user-centred "video + social media" positioning has been clarified. In today's video-centric society, video has not only become a new audio-visual form but has also created an audio-visual culture and civilisation (Meng et al., 2023). Among the most popular video platforms in China are

TikTok (Douyin), Kuaishou, and Bilibili, each with different characteristics and user groups. The popularity of these platforms depends on user interests and needs. Bilibili has received substantial attention for its unique original content, barrage culture, high-quality content, and community activity.

The streaming video provider Bilibili announced a total revenue of 1.37 billion RMB in the first quarter of 2019 (China Internet Watch, 2019; Zhang & Cassany, 2021), with monthly active users (MAU) exceeding 101 million and paying MAU totaling over 4 million. With a significant year-over-year growth of 70%, its MAU increased to 172 million during the second quarter of 2020 and its revenue to 2.62 billion RMB (China Business, 2020; Liao, 2020). This demonstrates Bilibili's significant financial success and appeal to youthful audiences, as evidenced by the 89 million netizens who had passed the entry test by the second quarter of 2020 (Bilibili, 2021). It is clear that Bilibili has a vast and influential market, especially among college students.

According to the survey, Bilibili is among the most popular social media platforms among college students in China (Fitzgerald et al., 2022), which targets foreign YouTubers. Bilibili serves as a comprehensive video community where China's younger generation congregates. iResearch research shows that more than 86% of Bilibili's customers are under 35 years old in 2020 (2023 Insight Report on Mobile Phones and Digital Interests of Generation Z, 2023). Bilibili has 272 million average monthly active users as of the fourth quarter of 2021. Established in 2009, Bilibili is one of China's most prestigious and rapidly expanding online video-sharing entertainment platforms (Li, 2019). It is ranked first among the top ten applications preferred by young users aged 24 and under and creates a younger and more educated

audience for Bilibili (Han et al., 2021). In light of this, Bilibili is defined as a highly developed cultural community and video platform well-liked by China's Gen Z.

Notably, Bilibili is the first bullet-point video-sharing platform for animation, comics, and games (ACG) in mainland China (Han et al., 2021). Currently, Bilibili, as China's leading platform for professionally produced user-generated content (PUGC), draws many content creators. (Wang, 2022). Bilibili also stands out from other platforms because of its emphasis on user-generated content, which offers a variety of content to suit Gen Z's interests. This trend has the potential to improve cultural judgement and creative expression in fashion and other fields (Peng, 2023). This is why Bilibili attracts significant attention in China. According to research, Bilibili's content is divided into several smaller sections, which cover a variety of topics, including video games, fashion, and animation. Bilibili provides a space where both producers and fans find a sense of community (Han et al., 2021). People in the circle continue to produce and publish new material in an effort to draw others with shared interests and have generated tremendously high-quality content for Bilibili (Han et al., 2021). According to an iResearch online study from February 2021, the Gen Z consumer group in China is primarily male and includes more than 40% of students (2023 Insight Report on Mobile Phones and Digital Interests of Generation Z, 2023). This generation, due to their higher level of education, is also more exposed to and accepting of new cultural phenomena and products (Han et al., 2021). Without a doubt, Bilibili dominates mainland China's new media sector as one of the most well-known websites among young Chinese people and as a multi-cultural platform.

Bilibili has set a fantastic example for all major platforms in the age of new media. The benefits and competitiveness of Bilibili, which rose from obscurity to

become one of the most popular video sites in China, are clear. (Han et al., 2021). Based on the above research, Bilibili is used as the main social media platform for course teaching because it is a well-known video-sharing website in contemporary mainland China (Cheng, 2020). Statistics on the basic information of college students as participants in this study indicated that 92% of them are also Bilibili users. Therefore, Bilibili is the primary social media platform utilised in this study.

#### 1.2.3 Interactive Methods and Barrage Culture at Bilibili

It is clear from the description above that youth favour Bilibili for its interactive elements. New communication techniques have arisen in new media, including live broadcasts, barrage comments, and group conversations. These methods encourage communication between the media platform and its audience. The most distinguishing feature of Bilibili is its barrage communication platform, which allows users to create more content and share their ideas. In this way, the audience is both the consumer and the creator of the video content (Han et al., 2021). Viewers frequently seek opportunities for social interaction and active engagement (Liu et al., 2016a). The user's comments on the video and the barrage of comments sent during viewing are the most crucial aspects of video user participation.

Bilibili has integrated real-time barrage comment technology to increase the participation of online users. The new online commenting system is powered by this particular interactive technology, enabling users to publish and share videos and engage with other users on an equal footing. Young users on Bilibili can watch their favourite cartoons and comics and write comments in real-time over the playing video thanks to its special barrage comments technology. Bilibili provides ACG fans with a

platform to connect with others who share their interests and engage in real-time conversation. Such interactive systems create a consistent user base, boosting each user's sense of engagement (Cheng, 2020). Through participation, users can gain more information.

A new, instantly updated interactive commentary system synchronised with online video is called Barrage, also known as the "bullet screen." Once sent, comments appear immediately on the screen (Cui et al., 2019). Barrage, one of Bilibili's competitive advantages, has become a popular way for young people to react in recent years (Han et al., 2021). Real-time comments can be made during video watching, resulting in innovative communication and virtual interaction. For Gen Z, who love creative online engagement, this element is essential to Bilibili's identity and improves the user experience (Peng, 2023). Young people use this platform to express their feelings, self-presentation, and re-creation of popular culture (Cheng et al., 2019). Therefore, on Bilibili, college students, especially ACG enthusiasts, can make realtime comments based on their interests and hobbies, express their ideas, conduct innovative exchanges, and increase a strong sense of participation. Social media also facilitates instantaneous interactive class dialogue and remarks for teachers and students (Ma et al., 2023). According to Ma et al. (2023), social media usage is intended to improve instruction and students' ongoing use intentions through interactivity. The continuous use of social media in education is positively impacted by its perceived interactivity and educational outcomes. Students who view social media as an effective teaching tool are more likely to welcome its use. Based on Bilibili's advantages in terms of self-expression, social interaction, entertainment, information, immersion, and professional advancement for college students, barrage

culture and comments have become integral to interactive communication and guidance in creative courses.

#### 1.2.4 The Impact of Social Media on Higher Education

In recent years, the rapid growth of social media communication has also demonstrated its advantages in various industries (Anser et al., 2020). The popularity of social media has also had a significant impact on higher education (Zachos et al., 2018). Existing research has indicated that social media is also growing in popularity among college students and gaining influence within the educational community, thus demonstrating its advantages in higher education (Friesen & Lowe, 2012; Greenhow et al., 2023; Malik et al., 2020).

According to the characteristics of social media in the video above, it has become an integral part of students' lives (Gulzar et al., 2022). Social media is acknowledged as a great instrument for contemporary learning, according to research (Al-Rahmi et al. 2019, Lin et al. 2016, Sutherland & Jalali 2017). Our daily lives and studies now include social media platforms, demonstrating their significance.

A common public misconception is that social media is only for entertainment. In addition to pleasure, social media use offers significant academic benefits since it encourages college students to be more creative and engaged in their academics. According to research, social media is being actively used in the education sector (Allam et al., 2019). Teachers and students should be aware of this, so they may encourage students to use social media platforms for productive learning during university teaching activities. (Allam et al., 2019). There has been much research on the advantages of social media for learning in higher education, with important

findings across a variety of fields (Fox & Bird 2017; Greenhow & Askari 2017; Rodrguez-Hoyos, Salmón, & Fernández-Daz 2015; Selwyn & Sterling 2019). Several researchers (Krutka & Carpenter 2016; McLoughlin & Lee 2010) argue that social media is a potent force for change that can adapt learning demands into more social and open situations, upending the conventional constraints of instructional settings. Social media may assist learning networks and social interaction in formal and informal learning and re-engage younger generations of students with higher education (Junco 2014; Siemens & Weller 2011). This reflects the positive role of social media in higher education.

Due to its roles in knowledge sharing and knowledge building, social media has evolved into an effective medium for teaching and student learning. Higher education promotes the use of social media to increase learning awareness since the value of social media and the significance of personal motivation remain apparent (Hosen et al., 2021). Therefore, social media motives and functions are core elements of higher education to promote information sharing and enhance the learning cognition of college students.

#### 1.2.5 Social Media Inspires Creativity in College Students

The impact of social media on higher education is mainly reflected in the stimulation of the creativity of college students. The increased use of the term "creativity" in China's economic development planning highlights the importance and need for change in China's education system. It also ensures the effective development of creativity among students (Pang & Plucker, 2012). The development of creativity is a prerequisite for social success, a key indicator of national economic

competitiveness, and an important factor influencing the level of educational development (Matraeva, 2020). Moreover, the importance of student creativity development has also been highly valued. According to experts, creativity is an important solution to the main problems of modern society and the creator of a new type of production based on information and knowledge economies (Matraeva et al., 2020). Creativity to be creative has become even more crucial for college students in the twenty-first century (Thomas & Vinuales, 2017). Therefore, cultivating creativity has become an important topic in higher education.

Hernández-Torrano and Ibrayeva (2020) found that creative research is related to education and training right from the outset. For example, Guilford (1950) believes that experts have always believed that "real learning is achieved by emphasising creativity in the classroom" (Beghetto & Plucker, 2006). If the main purpose of school education is to prepare students for development, one crucial method to achieve this goal is by cultivating students' creative thinking (Vygotsky, 1967).

Meanwhile, social media platforms serve three major purposes: to improve people's creativity; to foster knowledge; and to examine changes in social behaviour (Chen et al., 2019). College students have access to a social environment through social media, which greatly facilitates their creativity (Jahnke et al., 2017). Social media usage may enable college students to develop unique solutions to interconnected issues. Creative students exhibit keen interest and generate novel solutions (Thomas & Vinuales, 2017). Social media has influenced communication and education, and it seems to have changed students' information-seeking behaviours. Some studies show that students utilise social media platforms to fulfil some academic and non-academic information needs (Kim et al., 2011; Shin & Kim, 2016) and that social media usage

can stimulate creativity in research and education (Hu et al., 2017) and provide a platform for productive knowledge exchange that facilitates more creative outcomes among students (Rasheed et al., 2020).

A study by Malik et al. (2020) shows that social media has a significantly positive impact on student performance (Chesston et al., 2013). Social media platforms stimulate the creativity and academic performance of students at all levels, especially college students. It is important for college students to use social media for educational purposes (Jahnke et al., 2017). Scholars believe that network media and tools can boost student creativity and awareness, thereby strengthening students' creative practice. (Chai & Fan, 2017). Additionally, engagement with media interaction and professional work will increase students' knowledge and further improve their creativity and professional outcomes (Junco et al., 2011). Meanwhile, Malik et al. (2020) also found that social media is a platform for student communication and can help students better develop their professional skills. Social media not only helps students become more knowledgeable in their field but also encourages innovation. Lau et al. (2017) believe that students can use social media platforms to cooperate and interact with professionals to improve their professional results. Through interaction, students can obtain various resources to promote creativity (Calderwood et al., 2014), which shows the importance of social media in education and its impact on student creativity. Meanwhile, learning through social media platforms is an important part of university learning (McGloughlin & Lee, 2010). Kusurkar et al. (2013) found that motivation is positively correlated with the use of effective learning strategies. Lepper (1985) reported that new technologies can affect students' abilities, thereby establishing their learning motivation and generating creativity and academic achievement. Researchers have discovered that social media usage boosts student creativity. Social media usage by students can increase their intrinsic motivation, thereby encouraging innovation (Gulzar et al., 2022).

Student creative development is significantly aided by intrinsic motivation (van der Zanden et al., 2020). According to motivation theory, intrinsic motivation for learning is influenced by external factors (Arkes & Garske, 1982; McAuley et al., 1989). Therefore, students' intrinsic motivation for productivity is impacted by the stimulation of external stimuli on social media.

As a feature of intrinsic motivation that emphasises involvement, student engagement is directly associated with intrinsic motivation (Ryan & Deci, 2017). Additionally, there is a positive correlation between academic achievement and students' intrinsic motivation (Zaccone & Pedrini, 2019). Existing studies have shown that academic contexts where intrinsic motivation is present are linked to notable accomplishments (Kotera et al., 2023). Therefore, the intrinsic motivation generated by social media usage is highly beneficial for the exploration of creativity among college students.

The relationship between social media, intrinsic motivation, and student creativity can be explained through the Stimulus-Organism-Response (S-O-R) theory. This theory consists of three variables: stimulus as a predictor variable, organism as an intervention variable, and response as an outcome variable (Yoo et al., 1998; Vieira, 2013; Turley & Milliman, 2000). This theory is suitable for explaining the behaviour of students using social media. Therefore, the S-O-R theory is used in the 2.8 theoretical framework.

# 1.2.6 The Characteristics of China's Art Higher Education and the Integration of Social Media

With the development of higher education in China, art education has expanded into a wide range of fields. The establishment of public art education has broadened the scope of art courses in Chinese higher education institutions, thus improving students' aesthetic abilities and qualities. Through art education, students can improve their problem-solving skills and creativity (Yu, 2022). However, the effectiveness of art teaching is restricted by methods and technology, and the COVID-19 pandemic has exposed certain difficulties in art education. Online courses for art majors have not met expectations, making it necessary to enhance classroom rituals and interactions to increase student participation (Xiong, 2021).

Therefore, effective interactive methods are being actively sought in art teaching, and there is a need for diversification in art education. Social media have become an important tool in art teaching methods (Yang, 2022). Art students, due to the nature of their majors, require not only a supportive atmosphere, a broad educational foundation, and strong creativity. In China, art college students exhibit characteristics such as strong perceptual thinking, active thinking, a focus on professional skills, and a neglect of cultural courses. They also have a strong desire to create and cultivate outstanding creativity. Since social surroundings may be related to creative expression, art students can utilise social media to enhance their creativity (Chai & Fan, 2017). Social media enable them to record, save, share instantly, and communicate, thus increasing the likelihood of inspiration (Manca & Ranieri, 2016). Educators are increasingly aware of the importance of social media platforms in improving student creativity, and research indicates the role of social media technology-centred education as a creativity booster in arts education (Danvers, 2003;

Livingston, 2010). Therefore, it is an imperative trend for educators to improve creativity among college students through social media platforms.

Based on the above research, this study targets college students in China. Modern college students belong to Generation Z, known as the Internet generation, born in the latter half of the 20th century and the early 21st century. In 2020, Generation Z (also known as Gen Z or Gen Zers, born after 1995) comprised over one-third of the global population, according to the United Nations Population 2030 Demographic Survey. They have unique attitudes, interests, and ways of thinking compared to typical "digital natives." They are not only skilled in Internet features but also favour novelty. Gen Z exhibits an inclination to create their own cultural identities through social networks, which facilitates their understanding of themselves and their values (Song & Chen, 2021). As of November 2020, there were more than 300 million Gen Z Internet users in China. They have a substantial online presence and are major players in the digital economy (2023 Insight Report on Mobile Phones and Digital Interests of Generation Z, 2023). This online engagement is highly beneficial for boosting the creativity of Generation Z through social media.

This study's participants were university art students. According to Al Hashimi et al. (2019), students' preferences for the use of social media platforms to boost creativity can vary depending on their creative discipline. Therefore, researchers recommend that educators implement the most suitable social media platforms to foster creativity based on student preferences and course objectives.

#### 1.3 Problem Statement

The Chinese education system is exam-centred, with students required to provide standard and correct answers rather than novel and creative answers. This

poses a challenge to the development of student creativity (Xu et al., 2024). Education tends towards the memorization of basic knowledge, which often leads to a lack of emphasis on creativity (Yang & Heong, 2024). Educational success now requires not just the reproduction of knowledge but also extrapolation from what is known and applying that knowledge to new situations. Traditional education methods can no longer meet the needs of contemporary education. Innovation will become a means of educational reform, which helps educators create future learning directions for students. Creativity, critical thinking, communication, and collaboration have become the focus of future education development (Thornhill-Miller et al., 2023). Therefore, educators like Robinson and Aronica (2019) believe that we should completely rethink the school education system and boost student creativity (Trevallion & Nischang, 2021). This has also become an important development direction in higher education.

Numerous researchers have demonstrated that institutions of higher education play a key role in a changing world. In terms of social, economic, cultural, scientific, and political development, higher education is essential to the development of the country. Educated individuals can transcend from being human beings to human resources. In the current globalised environment, a top-notch university education is necessary to foster creativity, talent, flexibility, and a research-oriented mindset. To maximise educational outcomes, it is critical to ensure that education meets the constantly evolving demands of society everywhere (Kumar et al., 2020).

One location with a high concentration of educational institutions is Jiangsu (Zhuang & Liu, 2022). It has a rich history, top-notch colleges, and has cultivated many outstanding talents (Xu et al., 2020). The Jiangsu government made the decision to execute an innovation-driven strategy, a technical innovation-driven strategy, and a

talent training plan in the "13th Five-Year Plan" in order to use innovation to support steady and effective economic growth in Jiangsu (Xu et al., 2020). Jiangsu Education is an important part of China's education system. It is committed to providing high quality higher education (Gaoyuan et al., 2020). However, studies reveal that Jiangsu Province lacks adequate coordination and has few resources for higher education spread across several areas in the higher education innovation capabilities system. As such, it has fallen short of what was anticipated in innovative education (Xu et al., 2020). Other issues with innovation models include low usage efficiency, a lack of incentive for innovation, and a mismatch between innovative capabilities and educational resources (Liu et al., 2021). Higher education is the primary source of innovative knowledge and a significant supplier of inventive talent, as higher education is in charge of developing skills (Liu et al., 2021). Therefore, modern education programmes often fail to meet the needs of the market economy and talent market due to underestimating the development of creativity and insufficient research on its development. Creativity in higher education institutions represents an important but underutilised resource in the modern knowledge economy (Maksić & Spasenović, 2018). The cultivation of animation talents, for instance, requires the development of innovative capabilities, which is essential for the development of the animation market (Wang, 2024). Studying creativity is indispensable to modern education.

Creativity is inherent to the human species; all individuals are naturally curious and creative. However, this skill is often not developed in our school system, as it is not valued as highly as literacy or numeracy in traditional teaching (Robinson & Aronica, 2019). From traditional teaching methods to the incorporation of social media platforms into teaching, these platforms exhibit undeniable potential to enhance students' creative learning. Studies demonstrate the value of creativity in higher

education and its relationship with social media, indicating strong correlations between students' creative expression on these platforms and their social media usage (Rasheed et al., 2020). However, educators have yet to fully explore and leverage social media to develop student creativity (Al Hashimi et al., 2019). Therefore, it is crucial for educators to fully explore and utilise the advantages of social media platforms to develop student creativity.

Despite the increasing social media usage, little is known about its impact on students' research training (Rasheed, 2020). In modern society, social media usage can drive student creativity. Students' social media usage may increase their intrinsic motivation, thereby boosting their creativity (Gulzar et al., 2022). Wang (2023) indicates that Chinese educators often neglect creative teaching and tend to overemphasise basic teaching and elementary skills. Therefore, there are few opportunities for students to participate in creative activities. If educators teach how to be creative, it will be easier for them to show their creativity.

Maslow (1997) believes that creativity is related to individual needs, suggesting that the level of individual needs is directly proportional to creativity; the higher the needs, the higher the creativity. Although creativity is inherent in everyone, various factors often lead to its decline (Maslow, 1997). The lack of creativity among animation creators has caused bottlenecks in the development of the market (Wu & Wang, 2020). Ma's research (2015) shows that the abilities of animation students are declining, with creative thinking ranking as the most important skill, even above professional animation knowledge. Meanwhile, Malik et al. (2020) identified student creativity and professional achievement as important indicators of student performance. The efforts to meet students' specific needs and prepare them for success

in a complex, unpredictable environment are the fundamental drivers behind the emphasis on creativity in education. Creativity development is becoming an educational priority (Hernández-Torrano & Ibrayeva, 2020). Simultaneously, studies indicate that creativity is the innate ability to generate original ideas, which is crucial for the development of one's goal of becoming an entrepreneur. Since it takes creativity to spot and seize chances, creativity is seen as a necessary component of entrepreneurship (Anjum et al., 2020). This is crucial for college students, whether they are preparing for future employment or studying in class. The key issue now is how to improve student creativity and professional results. Research shows that the quality of education is improving slowly, especially in the development of creativity. Although universities have implemented a series of reform measures with innovative education as the main content, there are still many limitations (Zhu et al., 2017). Research shows that students have a strong theoretical foundation, but their creativity has not met expectations (Fu, 2018). Despite radical changes in the world, teaching methods have not evolved significantly. Education still prioritises memorization, and cognitive methods shown to foster creative thinking are rarely introduced or used in classroom activities and sessions (Ritter et al., 2020). Organisational executives worldwide find that, although graduates are otherwise well prepared, they lack innovation. Being creative is now a necessary skill. Today, there is a greater need for creativity than supply at every level. Scholars and decision-makers from all over the world have stressed the need to develop student creativity to fulfil the demands of the twenty-first century (Ritter et al., 2020). Educator Ken Robinson demonstrates that the cultivation of the ability to apply prior information to generate original ideas and solve problems is largely absent from school curricula. Often, the growth of creativity is integrated into art classes at schools that emphasise creativity (Ritter et al., 2020). Therefore, how to improve student creativity has become an important topic in higher education research (Wang et al., 2022).

Meanwhile, creativity is not an inherent trait; it can be acquired and cultivated. Nonetheless, this aspect is often overlooked in the education sector (Ritter et al., 2020). Empirical evidence indicates that schools provide an ideal setting for creativity development. A few academics have connected economic and cultural progress to creativity in the classroom. Many nations place a strong emphasis on student creative growth in their curricula. Scholars and theorists have long maintained that a focus on creativity in the classroom is beneficial for meaningful learning (Hernández-Torrano & Ibrayeva, 2020). Creativity in the classroom is a topic of great interest to educators worldwide. Educators aim to foster a creative learning environment where students can think creatively, express their ideas better, and solve challenging problems in creative ways.

The importance of student creativity is evident, but research shows that the creativity of college students is declining. At present, college students make increasing use of social media for learning activities, and social media has a positive influence on their creative performance. The challenge now is how to use social media platforms to improve student creativity. The use of creative teaching techniques in the classroom is a growing concern among professors. Additionally, university educators are continually researching ways to foster a creativity-friendly environment so that students may think and express themselves with greater freedom. In light of the rapid expansion of social media, it is important to investigate how social media might foster creativity in the classroom. Despite the increasing importance of creativity, little is known about how social media platforms can be utilised to foster creativity in the

present educational environment (Al Hashimi et al., 2019). The concept of creativity covers different aspects, and existing research has not established a comprehensive framework (Anderson et al., 2014; Sawyer, 2019). With rapid economic development and an active labour market, the demand for creative young professionals is rising. The lack of methods to identify and develop student creativity highlights the importance of this study (Matraeva et al., 2020). Therefore, it is necessary to study how social media can cultivate creativity among college students in classrooms.

On the one hand, previous research has explored the relationship between social media and creativity, suggesting that intrinsic motivation mediates this relationship. However, the research mainly focuses on technological creativity, not artistic creativity. Meanwhile, intrinsic motivation has been proposed as an intermediary reason, but it has not been clearly defined as a mediating variable. Previous research was often based on the subjective evaluation of students, which lacked objectivity and rigour, indicating a need for in-depth research. On the other hand, there is no theoretical framework for the relationship between social media, intrinsic motivation, and student creativity. In view of these gaps and existing issues, in-depth research is needed to address these limitations.

As per Maksić and Spasenović (2018), creativity at higher education institutions is a valuable yet untapped resource in the contemporary knowledge economy, making it crucial for higher education. Social media is crucial for personal creativity development and contributes to the formation of personal knowledge systems, according to Chai and Fan (2017). However, educators still need to learn more about how to use social media to help students become more creative (Al Hashimi et al., 2019). Despite its growing use, little is known about social media's

effects on students' research training (Rasheed, 2020). As a result, it is imperative that educators properly investigate and use social media platforms to foster student creativity. According to Tokan and Imakulata (2019), intrinsic motivation directly impacts learning behaviours, which in turn influence the learning process.

Based on the above, the hypothesis in 2.9 will focus on how social media affects student creativity. This research question is divided into four hypotheses: (1) study the impact of social media on intrinsic motivation; (2) study the impact of intrinsic motivation on student creativity; (3) study the impact of social media on student creativity; and (4) study the mediating role of intrinsic motivation in the impact of social media on student creativity.

#### 1.4 Research Questions

This study moves towards answering the following question:

- 1. What are the intrinsic motivations of college students' animation creations under the influence of social media?
- 2. How does social media influence animation students' creativity through intrinsic motivation in university of China-Communication Universities of China Nanjing (CUCN) in Jiangsu Province?
- 3. What is the effectiveness of students' creativity of animation major in Chinese university?

#### 1.5 Research Objectives

The main objective of this research is to determine how social media influences animation students' creativity through intrinsic motivation at the University of China. The main objective is divided into the following three sub-objectives:

- 1. To discover the intrinsic motivation of college students' animation creations under the influence of social media.
- 2. To analyse how social media influence animation students' creativity through intrinsic motivation in university of China--Communication universities of China Nanjing (CUCN) in Jiangsu Province.
- 3. To evaluate students' creativity of animation major in Chinese university.

#### 1.6 Study Significance

This study contains two aspects of significance: one is the establishment of theoretical models, and the other is practical significance.

#### 1.6.1 Theoretical Significance

The study contributes to the literature on higher education by addressing intrinsic motivation, an area that has been overlooked in existing studies. Through the application of S-O-R theory, a theoretical model that links social media, intrinsic motivation, and student creativity was established. The Stimulus-Organism-Response theory was applied to social media, intrinsic motivation, and student creativity. In relational studies, this is the innovative content of the research. Although the possible relationship between social media, intrinsic motivation, and student creativity has been

mentioned in previous studies, the predictive effects have not been studied in depth. This research refines the understanding of mediator variables related to intrinsic motivation and creativity and further studies the relationship between these three variables through hypotheses. It advances developmental research on the interconnectedness of social media, intrinsic motivation, and student creativity.

#### 1.6.2 Practical Significance

Firstly, factors influencing student creativity have captured increasing attention. The impact of social media on higher education has also attracted much academic attention (Hull & Dodd, 2017). Research shows that the learning and performance methods of higher education students can be improved through social media usage (Dzvapatsva et al., 2014). Social media affects and changes the way people communicate, entertain, read, learn, share information, and plan activities. Intrinsic motivation can boost the creativity of animation students, leading to better work, professional communication, and professional practice (Sun, 2020b). Therefore, this study provides insights for schools and governments, with an emphasis on these variables that can enhance student creativity (Machali et al., 2021). This aspect has a positive impact on the cultivation of talent.

Secondly, creativity is related to students' entrepreneurial intentions, with the level of student creativity directly proportional to the strength of their entrepreneurial intentions (Runco & Pritzker, 2020). Creativity significantly influences students' future careers, especially in the competitive business world. Entrepreneurs need to be creative and innovative to overcome crises and succeed in business competitions. Those who lack creativity and innovation may fail in competition (Zampetakis et al.,

2011). Policymakers and scholars generally agree that entrepreneurship has a significant impact on economic development (Beresford, 2020; Du & O'Connor, 2018). Entrepreneurship supports the national economy by creating jobs (Peprah & Adekoya, 2020). Previous studies have demonstrated a direct correlation between entrepreneurship and economic growth (Akinwale et al., 2020; Stoica et al., 2020). The Chinese government encourages college students to innovate and start businesses (Wang, 2019). Due to the important role of innovation and entrepreneurship in the economy, research on entrepreneurship is increasing. Most studies have focused on the importance of student creativity education (Liguori & Winkler, 2020; Saptono et al., 2020; Wardana et al., 2020). Creativity development can promote participation in entrepreneurial activities and entrepreneurial education for students and can also stimulate their creative thinking. Meanwhile, there is a strong correlation between school entrepreneurship education and student creativity (Machali et al., 2021). Therefore, active creativity development will significantly impact students' entrepreneurial practices, employment opportunities, and future economic development.

#### 1.7 Study Scope

This research mainly investigates how social media influences student creativity through intermediary variables. The study begins with a review of the literature to identify potential relationships between various variables. It then examines how social media influences student creativity, considering intermediary variables related to students' intrinsic motivation for creative activities, such as self-expression, social interaction, entertainment, immersion, information, professional progress, etc.