

# Progress and Trends in Empirical Research on Cross Cultural Adaptation of International Students

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**Abstract:** Cross-cultural adaptation is an important research topic in the field of cultural psychology, which refers to the psychological and behavioural adjustments that individuals make when they are influenced by the stimuli of a new cultural environment, and this adjustment process is called cross-cultural adaptation. The process of cross-cultural adaptation may result in emotions such as frustration, anxiety, worry, and even a negative impression of the local culture. This paper reviews relevant studies at home and abroad that focus on international students as the target population, and systematically comprehends the conceptual definition, subtypes, structure, measurement tools, influencing factors, and interventions of cross-cultural adaptation. On this basis, it points out the direction of future research, with a view to providing corresponding suggestions for sojourners who are mainly international students.

**Keywords:** Cross-cultural adaption; Typology; Measurement; Review

## 1. Introduction

Globalization has made international trade and academic exchanges increasingly prosperous, providing travelers with different identities with opportunities to study, work, and live in foreign countries. At the same time, it has also promoted the development of multiculturalism in the world. Cross cultural adaptation, as an important issue in cross-cultural communication, is receiving increasing attention from academia and industry.<sup>[1]</sup> International students and travelers may encounter cross-cultural adaptation barriers when experiencing cross-cultural adaptation in a foreign country. Adapting to different cultures and achieving cultural identity is the foundation for international students to survive and develop in their host country.

The cross-cultural adaptation of international students is not only related to their personal academic performance, but also to the evaluation of the host country after returning home. Korean scholars have pointed out that Korean college students are not prepared enough to deal with the cultural diversity of foreign students, resulting in a lack of interpersonal skills and even biased and discriminatory attitudes towards foreign students (Lim Do-kyung and Kim Chang-sook, 2011) .<sup>[2]</sup> We need to pay attention to the adaptation of this large cross-cultural group. Once cross-cultural barriers arise, they may have counterproductive effects, leading to anxiety, depression, and other psychological states in cross-cultural adaptation, reducing learning efficiency or quality of life, and even causing conflicts.

## 2. Definition of Cross-Cultural Adaptation

In 1936, anthropologists Redfield and others proposed the concept of cultural adaptation, believing that cross-cultural adaptation is the phenomenon of continuous and direct cultural contact between two groups with different cultures, resulting in a change in one or both of their original cultural patterns.<sup>[3]</sup> This is a definition proposed from the perspective of group cross-cultural adaptation, which they referred to as acculturation, which can be translated as "cultural adaptation" or "acculturation". In 1990, Searle and Ward proposed the definition of cross-cultural adaptation in their research, which refers to the psychological and behavioral adjustments that individuals make when stimulated by a new cultural environment. This adjustment process is called cross-cultural adaptation. At this point, cross-cultural adaptation evolved from the previous "acculturation" to "cross cultural adaptation", and the research content and connotation began to further expand. Jin Xianzhu (1997) pointed out that cultural

adaptation refers to foreigners transforming their own values, beliefs, behaviors, etc. into locals.<sup>[4]</sup>

Brown and Holloway (2008), from the perspective of knowledge and skill learning, believe that cross-cultural adaptation is the process of learning local cultural knowledge and skills. Through learning cultural knowledge and skills, obstacles to cross-cultural adaptation are gradually solved, and effective communication with local culture is achieved.<sup>[5]</sup>

Chinese scholars have been conducting empirical research on the cross-cultural adaptation of travelers since the 21st century, and researchers have provided their own definitions from different perspectives (See Table 1).

*Table 1 Definition of cross-cultural adaptation by Chinese scholars*

Number	Name	Time	Meaning
1	Hongjun Yang	2005	The adaptation of the resident to the new culture <sup>[6]</sup>
2	Weishan WU	2009	A process of social psychological and cultural change <sup>[7]</sup>
3	Lixing Gu, Xiaodong Dai	2012	Individuals or groups are exposed to new cultural contexts, have direct contact with the new culture, and continuously engage. The process of constantly making adjustments under pressure and ultimately forming cross-cultural identity. <sup>[8]</sup>

### 3. Patterns and Stages of Cross-Cultural Adaptation

In 1955, Lysgaard's U-shaped curve pattern divided cross-cultural adaptation stages into honeymoon period, crisis period, recovery period, and mutual cultural adaptation period.<sup>[9]</sup> This model was questioned by Ward and other scholars. In 1988, Ward and his colleagues studied the psychological and socio-cultural adaptation of Japanese students in New Zealand, and their adaptation did not show a U-curve adjustment pattern. Instead, they performed best when they first arrived in the host country, and problems gradually emerged over time.

Kalervo Oberg (1960) proposed the concept of "cultural shock" based on the Lysgard (1955) "U-shaped curve" model. He believed that after travelers entered a cross-cultural environment, they lost all familiar cultural symbols in social interactions, causing psychological anxiety disorder. Cross cultural adaptation was divided into four stages, namely honeymoon, setback, recovery, and adaptation.<sup>[10]</sup>

Gullhorn(1963) proposed the W-curve model based on the U-curve hypothesis, which showcases the process theory of travelers constantly reshaping themselves from a personal emotional perspective. They believe that travelers returning to their home country will undergo cultural readjustment as they have become accustomed to the social life of the host country, experiencing a U-shaped curve again, and the entire process of cultural adaptation is a W-shaped curve. Adler (1975) proposed the transitional experience model and the five stage model hypothesis of cross-cultural adaptation transition oscillation, which is also a study of the process of psychological state transformation in cross-cultural adaptation. He believed that the cross-cultural adaptation stage should be divided into contact period, imbalance period, restructuring period, autonomy period, and independence period.<sup>[11]</sup> A cross-cultural sensitivity model was proposed by Bennett in 1986,<sup>[12]</sup> which suggests that travelers can gain cross-cultural adaptability by possessing sensitivity to different cultures. The six stages of this model are the determination stage, resistance stage, minimization stage, adaptation stage, and integration stage. In 1986, American linguist Schumann linked cultural adaptation to second language acquisition and proposed the "Cultural Adaptation Hypothesis".<sup>[13]</sup> The process of second language acquisition for learners is also the process of adapting to the target language culture. Li Yahong (2016) proposed four major sources of stress for international students through a survey, namely "social connectivity, living environment, academic and career development, and family issues".<sup>[14]</sup>

### 4. A Typological Study of Cross-Cultural Adaptation

Typological research can accurately describe the complex phenomenon of cross-cultural adaptation, find solutions to cross-cultural barriers, and provide customized interventions for people with different characteristics of cross-cultural adaptation barriers. We mainly explore two issues: subtype and structural dimensions.

#### 4.1. Subtypes of Cross-Cultural Adaptation

Early typology mainly used empirical judgment to classify and study cross-cultural adaptation. Later, researchers began to attempt to choose clustering analysis methods for research, with the basic idea of using variables closely related to cross-cultural adaptation as clustering variables. Through clustering analysis of data variables, accurate conclusions were ultimately drawn.

##### 4.1.1. Cross Cultural Adjustment

Ward and colleagues have summarized that "adjustment" is used to describe psychological and emotional adaptation and adjustment, specifically manifested as individuals actively adjusting to changes in the external environment and maintaining internal stability through emotional adjustments in the face of external cultural differences.<sup>[15]</sup>

##### 4.1.2. Acculturation

Closely related to cross-cultural adaptation is also cultural integration, which refers to the psychological and behavioral changes experienced by travelers after interacting with people from different countries. Cross cultural integration with people from different countries mainly involves changes in values, cognition, attitudes, and attitudes. Maintaining relationships with local social groups and maintaining respect for one's own mother culture are two dimensions of cultural integration.

#### 4.2. The structure and dimensions of cross-cultural adaptation

Due to the involvement of the development of diagnostic tools in the study of the structural dimensions of cross-cultural adaptation, it has received attention from researchers. In terms of research methods, factor analysis or cluster analysis are often used to classify the sources of cross-cultural adaptation.

In 1985, Mendenhall et al. conducted empirical research indicating that the four dimensions of "self orientation", "others orientation", "perception", and "cultural resilience" are related to cultural adaptation.<sup>[16]</sup> Black(1991) classified cross-cultural adaptation into three dimensions: overall adaptation, work adaptation, and interpersonal adaptation. Ward (1999) divided cross-cultural adaptation into two dimensions: socio-cultural adaptation and psychological adaptation. Later, the emotional, behavioral, and cognitive ABC models of cross-cultural adaptation were proposed, which are reflected in psychological adaptation, socio-cultural adaptation, and cultural identity and inter group understanding.<sup>[17]</sup>

The research on the dimension of cross-cultural adaptation in China began in the 21st century, and the research group is generally travelers, international students, or international Chinese teachers working abroad. Different scholars have provided different dimensions, generally starting from several directions such as work, life, learning, and communication (See Table 2) .

Table 2 Classification of Cross cultural Adaptation Dimensions by Chinese Scholars

Number	Author	Time	Dimension
1	Wenhua Yan	2012	Overall, interpersonal, learning/work adaptation <sup>[18]</sup>
2	Yvhui Lv	2012	Work adaptation, life adaptation, and communication adaptation
3	Guohui Zhu	2011	Psychological adaptation, academic adaptation, socio-cultural adaptation <sup>[19]</sup>

#### 5. Scale and Measurement of Cross-Cultural Adaptation for International Students

A scale developed by different researchers based on their different perceptions of cross-cultural adaptation dimensions. Researchers generally develop questionnaires or scales based on dimensions such as socio-cultural adaptation, psychological adaptation, and academic adaptation for cross-cultural adaptation measurement of international students.

##### 5.1. Scale/Questionnaire of Social and Cultural Adaptation

###### 5.1.1. SCAS

Ward et al. (1999) developed the Sociocultural Adaptation Scale (SCAS) based on Furnham et al. (1982) social context questionnaire, which is now widely used to measure cross-cultural adaptation.

The reliability and validity of the scale were verified by 16 horizontal and 4 vertical samples. The scale uses Likert's five point scoring system to describe the difficulty level of the items for the filling out of the form, with "1-5" representing the difficulty level (or difficulty coefficient) of social and cultural adaptation for the five items: "not difficult", "somewhat difficult", "difficult", "very difficult", and "very difficult"=total score/full score.

Lei Yunlong<sup>[19-20]</sup> used this scale to measure the social and cultural adaptation of international students, and Lei Yunlong found that  $\alpha = 0.88$ , Huahua measures its overall reliability  $\alpha$  The coefficient is greater than 0.9.

### 5.1.2. EAI

In 1999, Isao Fukunishi et al. developed the Expatriate Adaptation Inventory. This is a scale consisting of four subscales with a total of 70 sentences, each measuring dimensions such as satisfaction with the host country, feelings, homesickness, and cultural shock symptoms.<sup>[22]</sup>

## 5.2. Psychological Adaptation Scale/Questionnaire

The academic community mainly measures psychological adaptation through two methods: the Zun's Psychological Adaptation Scale (SDS) and the Sandhu&Asrabadi Cross Cultural Adaptation Stress Scale (See Table 3).

Table 3 Psychological Adaptation Scale

Number	Scale name	Author	Content	Testing
1	SDS	Zung <sup>[23]</sup>	The International Academic Universal Psychological Adaptation Survey Scale consists of 20 items, each measured by the frequency of perceived occurrence. Among them, the positive feeling is scored using the Likert four component scale, while the negative measure is the opposite.	Lei Yunlong <sup>[20-21]</sup> and other scales refer to this scale in terms of psychological adaptation. Lei Yunlong found out that $\alpha$ The coefficient is 0.81, the KMO value is 0.839, which is greater than 0.8, and the p-value is less than 0.05, indicating high validity of the research data.
2	Cross Cultural Adaptation Stress Scale.	Sandhu&Asrabadi	Sandhu <sup>[24]</sup> developed a cross-cultural adaptation stress scale for international students	According to Zeng Qihui (2022) <sup>[25]</sup> , the Cronbach coefficient was 0.982.

### 5.3. Academic Adaptation Scale/Questionnaire

#### 5.3.1. Dunn Academic Adaptation Questionnaire

In 2008, American scholar Dunn<sup>[26]</sup> developed an academic adaptation questionnaire to measure Chinese students studying abroad in the United States. The questionnaire consists of a total of 53 items, including questions in 11 fields such as enrollment education and consultation, finance and employment, teacher-student communication, and academic adaptation.

#### 5.3.2. MISPI

This questionnaire was designed by John Porter in 1962 and consists of 132 items, covering 11 areas of students' learning and life, including enrollment education, academic consultation, and counseling guidance.<sup>[27]</sup> Porter adapted the scale in 1977.

## 5.4. Multidimensional Integrated Scale/Questionnaire

#### 5.4.1. Blackcross-Cultural Adjustment Scale

Black et al. developed the cross-cultural adaptation scale in 1989, which is frequently used in the field of cross-cultural adaptation. The scale adopts the Likert 7-point scoring method and consists of 14 items, measuring cross-cultural adaptation from three parts: general adaptation, interactive adaptation, and learning adaptation. Yang Junhong et al.<sup>[28-29]</sup> referred to this scale to measure international students. Tao Meijing tested its Alpha coefficient to be 0.982, indicating good reliability and validity.

#### **5.4.2. Zhu Guohui Cross Cultural Adaptation Questionnaire**

Researchers divide the cross-cultural adaptation of international students into three dimensions: psychological adaptation, academic adaptation, and socio-cultural adaptation. Based on the Furnham Social Situation Questionnaire, Searle and Ward (1990), Ward and Kennedy (1999) scales, a 35-item socio-cultural adaptation scale was developed by adding and deleting items in the socio-cultural adaptation section.<sup>[19]</sup> The psychological adaptation part adopts the Zung (1965) Self-rated Depression Scale. There are a total of 19 questions in the academic adaptation section, referencing the academic adaptation questions of Gillespie, Dunn, and Baker. The higher the score, the more difficult it is to adapt. After calculation  $\alpha = 0.9$ , with a determination coefficient of 0.81 ( $= 0.900 * 0.900$ ), indicating a high reliability of the scale. The coefficient of the Kaizemel Eugene test is  $0.884 > 0.5$ , and the significance probability of the Bartlett test chi square statistical value is 0.0000.05, indicating that the structural validity of the scale is reasonable.

### **6. Research on The Influencing Factors and Interventions of Cross-Cultural Adaptation**

#### **6.1. Influence Factor**

The structural dimensions, adaptation stages, adaptation modes, and survey subjects of cross-cultural adaptation recognized by different researchers are different, so the influencing factors of cross-cultural adaptation are multifaceted. This article only discusses the influencing factors of cross-cultural adaptation of international students and summarizes them into four aspects: demographic, social adaptation, psychological adaptation, learning adaptation, and other adaptation.

##### **6.1.1. Demographical Factors**

Among the factors that affect cross-cultural adaptation of international students, demographic factors are important, mainly reflected in ten aspects: gender, language proficiency of the host country, parental education level, length of stay in the host country, age, educational background of the international student, scholarship funding, overseas experience and motivation to go abroad.

##### **6.1.2. Other influencing factors**

Our research on cross-cultural adaptation shows that its influencing factors mainly include academic performance,<sup>[30]</sup> second language confidence, psychological well-being, cross-cultural sensitivity, cultural identity, and other aspects.

#### **6.2. Intervention Research**

In the field of cross-cultural adaptation research, there are still many aspects that we have not reached consensus on, but what has formed consensus is to provide different intervention measures for people with different characteristics of cross-cultural adaptation difficulties. Researchers conducted a study on the effectiveness of intervention in cross-cultural adaptation difficulties under different forms of intervention. From the research results, scholars' intervention research mainly focuses on psychological capital, learning anxiety, learning behavior engagement, social support, cultural distance, cultural intelligence, social media, self-efficacy, and adult attachment.

### **7. Research Direction and Suggestions**

#### **7.1. Research Direction**

##### **7.1.1. Clearly Define the Connotation and Extension**

The connotation is the key point of cross-cultural communication, while the extension is the scope and breadth of specific communication and interaction between different cultural groups. By defining the connotation and extension of cross-cultural communication, we can have a clearer understanding of the core concepts, objectives, and scope of cross-cultural communication, and avoid situations such as anxiety and misunderstandings in communication.

##### **7.1.2. Deepen the Research on the Mechanism of Obstacle Formation**

The formation mechanisms of cross-cultural adaptation barriers are relatively complex, and in-depth research on these mechanisms can help us develop targeted intervention measures to better

promote the adaptation and integration of international students in cross-cultural environments. It can also help us better understand why students face adaptation difficulties in cross-cultural environments and find corresponding solutions.

### ***7.1.3. Strengthen Customized Intervention Research***

Customized intervention research can provide effective support and guidance to help international students overcome anxiety, anxiety, and various difficulties and obstacles during cross-cultural adaptation. The goal of this type of research is to design and implement personalized interventions to meet the needs and challenges of different populations. It can better help students adapt and integrate into different cultural backgrounds, improve the effectiveness and success rate of cross-cultural communication.

### ***7.1.4. Sample Selection and Research Methods***

In previous studies, the age control of respondents was relatively concentrated, resulting in weak sample representativeness. Moreover, we should also give more consideration to the sample selection of international student groups. Many studies on cross-cultural adaptation have narrow sampling across countries, and in the future, research evidence from different countries should be reported.

Researchers should reduce subjective self reporting questionnaire surveys, and our survey data should be directly tested for single method bias through Harman's single factor test. The use of self-reported questionnaires should also consider qualitative research, such as interviews and experimental methods. At present, the evidence reported is mostly horizontal research evidence. In future research, more longitudinal research results should be reported, as longitudinal research will generate richer data sources that can identify and compare different adjustment patterns over a period of time. Considering a combination of horizontal and vertical research methods can provide a more detailed analysis of the relationships between variables.

## ***7.2. Suggestions for International Students***

### ***7.2.1. Strengthen pre Travel Training***

The research results indicate that international students in the host country may face similar levels of adjustment difficulties regardless of their cross-cultural adaptation, so they may benefit from cross-cultural training. When international students arrive in countries with similar cultures, they can increase their pre departure efforts and remind them of the trap of feeling overly confident.

### ***7.2.2. Deepen the Cultural Identity of the host Country***

Deepening cultural identity with the host country can help reduce barriers to cross-cultural adaptation. International students can develop a tendency to identify with the customs, language, culture, and religious beliefs of the host country from their own perspective. Through the collision and contact with foreign culture, we can innovate the home country culture and realize the harmonious coexistence of the home country culture and the host country culture.

### ***7.2.3. Establishing a Cross-Cultural Training System***

In 1991, Black believed that cross-cultural training was crucial for the success of travelers. Host country managers should provide local housing and other information to international students to help them learn local cultural, economic, and political knowledge; Train travelers on their ability to acquire cultural awareness information from the host country; Cultivate their ability to engage in practical learning activities and enhance their cognitive and behavioral skills. On this basis, a comprehensive cross-cultural training system will be established in the host country.

## **8. Conclusions**

This paper reviews the research on international students, and combs the definition, measurement tools, structure, subtypes, intervention measures and influencing factors of cross-cultural adaptation. It also points out the trend of future research and the shortcomings of this research, which can be used as reference for international students and researchers.

## References

- [1] Shi Xingsong, Zhu Xiaofen. *A Review and Prospects of Cross cultural Communication Research in China in the Last Decade* [J]. *China Foreign Language Journal*, 2015,12 (06): 58-64.
- [2] Lim Do-kyung and Kim Chang-sook. *A Study on Multicultural Perception and Preceding Factors of University Students: Focusing on Social Distancing, Foreign Image, and Conditions for Recognition of Koreans*, <Communication Studies: General> 19-1, Korean Society of Communication. It's pages 5 to 34, 2011
- [3] Redfield, R, Linton. *A Memorandum for the study of acculturation American*[J]. *Anthropologist*. Vol.38. No.1,1936.
- [4] Kim Hyun-joo, Jeon Kwang-hee, and Lee Hye-kyung. *A Study on the Process of Adaptation of Foreigners residing in Korea to Korean Society-Focusing on Intercultural Communication and Social Network*. <Korean Press Association>,1997, No. 40, 105-139.
- [5] Brown L, Holloway. *The adjustment journey of international postgraduate students at an English university: An ethnographic study*[J]. *Journal of Research in International Education*, Sage Publications Sage UK: London, England, 2008, 7(2):232-249.
- [6] Yang Junhong. *Research on cross-cultural adaptation of international students studying in China* [D]. East China Normal University, 2005-16.
- [7] Wu Weishan, Yan Huixian. *Cross cultural Communication Theory* [M]. Shanghai: Shanghai Commercial Press, 2009:165-180.
- [8] Gu Lixing, Dai Xiaodong. *Cross cultural adaptation* [M]. Shanghai Foreign Language Education Press 2012:12
- [9] Sverre Lysgaard. *An Extension of the U-Curve Hypothesis*[J] . *Journal of Social Issues*, 1955 (19): 33-34.
- [10] Oberg K. *Cultural shock: Adjustment to new cultural environments*[J]. *Practical anthropology*, 1960 : 177-178.
- [11] Adler .P .S. *The transitional experience: An alternative view of culture shock*[J]. *Journal of Humanistic Psychology*, 1975, 15 (4): 13-23.
- [12] Bennett M J . *A developmental approach to training for intercultural sensitivity*[J]. *International Journal of Intercultural Relations*, 1986,10(2):179-181.
- [13] Schumann, J. H. *Research on the acculturation model for second language acquisition* [J]. *Journal of Multilingual and Multicultural Development*, 1986(7):378-392.
- [14] Li Yahong. *Analysis of the psychological stressors of international students coming to China based on key event technology* [J]. *Journal of Central South University for Nationalities (Humanities and Social Sciences Edition)*, 2016, 36 (6): 192.
- [15] Ward,C., Kennedy, A. *The Measurement of Sociocultural adaptation*[J]. *International Journal of Intercultural Relations*,1999(23):659-677.
- [16] Mendenhall, Oddou. *The Dimensions of Expatriate Acculturation: A Review*[J]. *The Academy of Management Review*1985. 10(1):39-47.
- [17] Ward C, Bochner S, Furnham A. *The Psychology of Culture Shock (2nded)*[M]. Philadelphia: Routledge, 2001: 270-275.
- [18] Yan Wenhua. *Cross cultural Adaptation of German Travelers in China: A Qualitative Study*. *Proceedings of the 15th National Psychological Academic Conference*[C]. Chinese Psychological Society: Chinese Psychological Society, 2012:84.
- [19] Zhu Guohui. *Research on cross-cultural adaptation of international students from universities in China*[D]. East China Normal University, 2011.
- [20] Lei Yunlong, Gan Yiqun. *Investigation of cross-cultural adaptation among international students studying in China* [J]. *Chinese Journal of Mental Health*, 2004, 18(10): 729.
- [21] Qi Hua, Li Xiuyan. *Research on cross-cultural adaptation of Korean international students in Beijing* [J]. *Youth Research*, 2009 (2): 84-93.
- [22] Isao Fukunishi, James Wogan, Douglas Berger, and Tomifusa Kuboki. *Alexithymic Traits as Predictors of Difficulties with Adjustment in an Outpatient Cohort of Expatriates in Tokyo*. *Psychological Reports*,1999,,85(1),67-77.
- [23] Zung W K. *A self-rating depression scale*[J]. *Archives of General Psychiatry*,1965,12(1): 63-70.
- [24] Sandhu, D.S, & Asrabadi, B.R. *An acculturative stress scale for international students: A practical approach to stressmanagement*. In C. P. Zalaquett & R. J. Wood (Eds.)[C], *Evaluating stress: A book of resources*. Lanham, MD: Scare-crow Press, 1998:1-33.
- [25] Zeng Qihui, Li Yuxia. *Research on Cross cultural Adaptation of Chinese Students in the UK during the COVID-19 Epidemic* [J]. *Overseas English*, 2022, No.480 (20):193-196.
- [26] Dunn, J. W. *Academic Adjustment of Chinese Graduate Students in U.S. Institutions of Higher*

*Education*[D]. The University of Minnesota, 2006.

[27] Porter, J. W.. *The development of an inventory to determine the problems of foreign students* (Doctoral dissertation, Michigan State University 1962). *Dissertation Abstracts International*. 23, 3783-3784. (University Microfilms No. 63-1749).

[28] Tao Meijing. *A study on the impact of social media use on cross-cultural adaptation among international students studying in China: the chain mediating effect of inter group contact and social support* [D] Chongqing University 2021.

[29] Kim Young-sik, Kang Seunghye, Noh Sang-chung, and Joo Jae-won. *Focusing on the controlled control-mediating effect of career vision*[J]. *Korean Journal of Industrial and Organizational Psychology* 2021. Vol. 34, No. 4, 773-804.

[30] Han Han. *A study on the relationship between cross-cultural adaptation, learning behavior engagement, and academic performance of international undergraduate students* [D]. Nanjing University of Aeronautics and Astronautics, 2021.