

## COMPARATIVE ANALYSIS ON DIGITAL DIPLOMACY IN KAZAKHSTAN, UZBEKISTAN AND KYRGYZSTAN

Aigerim Tassilova, Zharilkasyn Zhappasov, Nazgul Shyngyssova,  
Meiram Sarybayev, Aigul Sadenova, Nazyia Tasylova,  
Gulnar Kozgambayeva  
Al-Farabi Kazakh National University, Kazakhstan

**Abstract:** *Digital diplomacy is a new and developing tool of public diplomacy. In 21<sup>st</sup> century, where information is the most powerful tool of politics, importance of the study of Digital Diplomacy increases for a several times. The purpose of this article is to analyze such concepts as public diplomacy, digital diplomacy and media diplomacy in the context of contemporary international relations. Also, the authors of the study conducted a comparative analysis of the involvement of diplomatic services of 3 countries (Kazakhstan, Uzbekistan, and Kyrgyzstan) in the sphere of digital diplomacy. In the course of the work, a scoring assessment of the positions of countries in international and national rankings was conducted. Statistical data were compiled for each country, which allowed obtaining the most complete picture of the digital trends in the diplomacy of the above three countries.*

**Keywords:** diplomacy, public diplomacy, media diplomacy, digital diplomacy, propaganda, foreign cultural policy.

Communication of an international actor's policies to citizens of foreign countries is commonly known as *public diplomacy*. These citizens might be anyone from the average ordinary waiter to a specialist across different sectors of industry, from non-governmental organizations to media institutions. Foreign ministries, non-governmental organizations and civil society organizations engage citizens through communication methods such as media, events and conferences, collaborative projects and exchanges of culture, personnel or students.<sup>1</sup> They try engage citizens and groups, whose opinions, values, activities and interests may help change another government's position. In other words, it called influencing government-to-government relations.<sup>2</sup>

The term „*public diplomacy*” has been using since at least the mid-nineteenth century. In the last few decades the study of public diplomacy developed and ranged to different trends. The purpose of this article is to define the concept of public diplomacy, introduce

---

<sup>1</sup> V. I. Fokin, S. S. Shirin, J. V. Nikolaeva, N. M. Bogolubova, E. E. Elts, V. N. Baryshnikov, „Interaction of cultures and diplomacy of states”, in *Kasetsart Journal of Social Sciences*, no. 38/1, 2017, pp. 45-49 ([www.doi.org](http://www.doi.org)).

<sup>2</sup> J. Pamment, *New Public Diplomacy in the 21<sup>st</sup> Century: A Comparative Study of Policy and Practice*, London, Routledge, 2013.

approaches to understanding of it. Moreover, we would like to indicate modern trends in the revolution of public diplomacy, particularly development of digital diplomacy. This article will examine differences and similarities of digital diplomacy of Kazakhstan, Uzbekistan and Kyrgyzstan.

## **Methods**

When writing a scientific article, the authors analyzed a wide range of publications on the research topic.

As a methodological basis for the study, the following methods were used:

1) Deductive method, which implies a path from theory to practice, from the general to the particular; allows to confirm or refute the theoretical canons, developed by domestic and foreign linguistics, with specific linguistic material; To determine on the basis of key theoretical bases the correspondence of concepts to the provisions of collective linguistic thought;

2) Inductive method, assuming a path from the private to the general, continuing the search for certain theoretical patterns of the functioning of a concrete concept;

3) Comparative method that allows comparing segments of different concepts and revealing national identity and international versatility;

4) Functional method that allows viewing diplomacy as a dynamic system.

## **Results and discussion**

### **Definitions of public diplomacy, media diplomacy and digital diplomacy**

The term „*public diplomacy*”<sup>3</sup> was established in usage by Edmund Gullion, former U. S. Ambassador in 1964. Professor Gullion found out that diplomats and journalists had much in common. E. R. Murrow from Center of Public Diplomacy states: „*Public diplomacy... deals with the influence of public attitudes on the formation and execution of foreign policies. It encompasses dimensions of international relations beyond traditional diplomacy; the cultivation by governments of public opinion in other countries; the interaction of*

---

<sup>3</sup> University of Southern Carolina Center of Public Diplomacy, *What is Public Diplomacy?* 2017, retrieved from: [www.uscpd.org](http://www.uscpd.org), accessed in 15.12.2017.

*private groups and interests in one country with those of another; the reporting of foreign affairs and its impact on policy; communication between those whose job is communication, as between diplomats and foreign correspondents; and the processes of inter-cultural communications”.*<sup>4</sup>

There are several differences between public diplomacy and traditional diplomacy. Public diplomacy differs from traditional diplomacy in that public diplomacy deals not only with governments but primarily with non-governmental individuals and organizations. Furthermore, traditional diplomacy actively engages one government with another government. In traditional diplomacy an embassy officials represent a country's government in a host country primarily by maintaining relations with the officials of the host government whereas public diplomacy primarily engages many diverse non-government elements of a society.

„My God, this is the end of diplomacy!” was the reported reaction of Lord Palmerston, British Prime Minister, on receiving the first telegraph message in the 1860<sup>s</sup>.<sup>5</sup> Since then communication technologies developed rapidly, especially in the last few decades. In 2005 there achieved a brand-new term: „*new public diplomacy*”. In the work *The New Public Diplomacy: Soft Power in International Relations*,<sup>6</sup> J. Melissen described how public diplomacy changed in modern 21<sup>st</sup> century's environment. He defined public diplomacy in three main characteristics:

- a change of diplomatic practices, which was made by new actors;
- engagement with foreign publics, which is connected to each other;
- moving away from one-way information towards dialogue and engagement.

The term digital diplomacy, distributed along with the concepts of internet diplomacy, diplomacy, social networking and Web 2.0 diplomacy, first began to be applied to U. S. foreign policy. In particular, it implies the widespread use of information and communication technologies (I. C. T.), including new media, social networks, blogs and media arenas in a global network to support public authorities to carry out the functions and communications on issues related a foreign

---

<sup>4</sup> University of Southern Carolina Center of Public Diplomacy, *Public Diplomacy before Gullion: The evolution of a Phrase*, 2017, retrieved from [www.uscpublicdiplomacy.org](http://www.uscpublicdiplomacy.org), accessed in 15.12.2017.

<sup>5</sup> J. Ramaprasad, „Media Diplomacy: in Search of a Definition”, in *Gazette*, no. 31, 1983, pp. 69-78.

<sup>6</sup> J. Melissen, *The new public diplomacy. Soft power in international relations*, Houndmills, Palgrave Macmillan, 2005.

political agenda. Currently, digital diplomacy programs are realized not only the U. S., but also a number of other countries.

The components of Lasswell's formula in communication theory are widely known: Sender-Message-Receiver.<sup>7</sup> Can we consider that public diplomacy is defined in terms of sender (diplomat) and receiver (public)? In this case is digital diplomacy defined in terms of the medium (digital channels) or it is a new and innovative form of public diplomacy?

Digital diplomacy is defined as the use of social networks in the diplomatic practice of the government to ensure interaction of foreign citizens with diplomats. Digital diplomacy is one of the areas of public diplomacy-oriented involvement in the diplomatic practice of the general population, rather than the interaction with the political and diplomatic elite of foreign countries. Diplomacy in the web includes placing radio and television broadcasts on the Internet, distribution literature in a digital format in open access, monitoring discussions in blog space, the creation of the first personalized pages of government officials in social networks, as well as the distribution of information through mobile phones.

The new age is dictating new rules of living; one of them is being a part of virtual community. Nowadays social media might be considered as explicit public diary of modern citizen, where we make gallery of our joyfulness, weaknesses and aspirations. In recent two last decade scholars, journalists and even ordinary people consider that the Internet as one of significant components of daily life of modern human. Since media studies represents social networking as the huge field which could be explored for the whole social sciences a lot of various techniques were developed to discover and analyze it. For example, S. Woolgar<sup>8</sup> and S. Chambers<sup>9</sup> questioned and tried to answer different questions about behavior of people in virtual reality. As cyber space started to rapidly grow and complicated virtual relationships were developed, the role of social networking in media had been substantially enhanced. Hence relationship between public diplomacy actors and citizens might attract large attention for academic research.

---

<sup>7</sup> G. Lasswell, *The structure and function of communication in society. The Communication of Ideas*, New York, Harper and Brothers, 1948.

<sup>8</sup> S. Woolgar, *Virtual Society? Technology, Cyberbole, Reality*, Oxford, O. U. P. Oxford, 2002.

<sup>9</sup> S. Chambers, *Catalogue 2.0: The future of the library catalogue*, London, 2013.

Most popular social network channels used by foreign ministries all over the world are Twitter and Facebook.<sup>10</sup> These two networks can be linked to one another and collect followers and drive traffic from one platform to the other. If Facebook was used mainly to connect friends and share updates in the beginning of its era, now it is a platform to write and share opinion, to use in professional outreach, to grow and develop communities and public places. Users of social media do not just write a messages and posts, now they expect engagement, they expect other users to listen to them, and respond. Therefore, these e-tools now used in both ways: to share information and to collect it. Using social media government gathers information, accesses public opinion and communicates with mass.

The results of a study conducted in August 2010 by the U. S. Peace Research Institute<sup>11</sup> show that new media have an impact on public opinion, mitigate or exacerbate inter-group conflicts, promote collective action, provoke negative backlash in states with authoritarian regimes, and attract international attention to certain countries. However, the authors of the study believe that it is not possible to draw unequivocal conclusions about the influence of social networks on protests and revolutions in the countries of North Africa and the Middle East. Traditional media are still no less, and often even more influential than social media.

Information today is a key resource of soft power in the international arena. Soft power involves the use of methods of influence, oriented to communication. The author of the soft power concept, J. Nye, defined it as follows: „*power is the ability to influence the behavior of others to get the outcomes you want. There are several ways one can achieve this: you can coerce them with threats; you can induce them with payments; or you can attract and co-opt them to want what you want. This soft power-getting others to want the outcomes you want-co-opts people rather than coerces them*”.<sup>12</sup>

J. Nye contrasts a soft power, focused on the attractiveness of the country at the expense of its culture, ideals or programs, a hard power, determined by the military or economic power of the nation. In the work

---

<sup>10</sup> M. Ittefaq, A. Ahmed, *Digital Diplomacy via Social Media (Facebook and Twitter). The Role of Social Media in Public Diplomacy A case of Pakistan's Embassies and High Commissions*, 2017, retrieved from [www.researchgate.net](http://www.researchgate.net), accessed in 13.02.2018.

<sup>11</sup> S. Aday, H. Farrell, M. Lynch, J. Sides, J. Kelly, E. Zuckerman, *Blogs and Bullets: New Media in Contentious Politics*, 2010, retrieved from [www.usip.org](http://www.usip.org), accessed in 5.01.2018.

<sup>12</sup> J. Nye, *Bound to Lead: The Changing Nature of American Power*, New York, Basic Books, 1990; Idem, *Soft Power: The Means to Success in World Politics*, New York, Public Affairs, 2004.

*The future of power* the author comes to the conclusion that in the era of information globalization, the very content of power is being transformed in international politics, which relies not on military but on information resources: „*In the information age, one who can imagine himself in the best light can win*”.<sup>13</sup> This is exactly what digital diplomacy programs of many countries are aimed at. The development of information technologies, including social networks, creates new technologies for the implementation of foreign policy goals, strengthening the soft and hard power of the state. At the same time, it is very difficult to unequivocally divide the soft and hard power.<sup>14</sup>

In the second part of the article we will try to look at use of social media and other tools of digital diplomacy in Central Asian countries: Kazakhstan, Uzbekistan and Kyrgyzstan.

### **Comparing digital diplomacy of Central Asian countries: Kazakhstan, Uzbekistan, Kyrgyzstan**

The central state body that carries out foreign policy activities is the Ministry of Foreign Affairs of the Republic of Kazakhstan (hereinafter – the Ministry of Foreign Affairs). According to the Law of the Republic of Kazakhstan of March 7, 2002 „On the Diplomatic Service of the Republic of Kazakhstan”, the Ministry of Foreign Affairs is developing the main foreign policy directions of the Republic of Kazakhstan and implementing international initiatives of the Head of State, and also submits relevant proposals to the President and the Government, coordinates the international activities of central executive bodies in relations with foreign states and international organizations.

According to M. F. A. of Republic of Kazakhstan official statement, Kazakhstan will provide timely and full information to the world community about its position on major international issues, foreign policy initiatives, political, social-economic and cultural-humanitarian development of the state.<sup>15</sup>

---

<sup>13</sup> Idem, *The future of power*, New York, Public Affairs, 2011.

<sup>14</sup> S. S. Shirin, N. M. Bogolubova, J. V. Nikolaeva, „Application of David Easton’s Model of Political System to the World Wide Web”, in *World Applied Sciences Journal*, no. 30/8, 2014, pp. 1083-1087.

<sup>15</sup> *Ministry of Foreign Affairs of Kazakhstan*, retrieved from [www.mfa.gov.kz](http://www.mfa.gov.kz), accessed in 20.02.2018.

For this purpose Kazakhstan takes advantage of modern information and communication technologies and traditional tools of diplomacy.

One of the areas of the program and become digital diplomacy. M. F. A. initiative involves addition of the traditional instruments of foreign policy tools of innovative governance, which will be used to ensure that the full potential of networking technologies, as well as the population in an interdependent world. Today more than 40% of the world's population is active users of the Internet, and this figure is growing every minute.<sup>16</sup> The starting point for the activation of public policy in the digital area was the realization of the Internet's potential impact on a significant number of P. C. users and owners of mobile phones in the world.

The number of active users of the global network in Kazakhstan at the end of 2016 amounted (about 55,8% of the population). Kazakhstan takes 43 place in this indicator-the number of Internet users in the country reached 9,9 million people, an increase of 1,3% over the year. Active users of social networks in Kazakhstan are 3,3 million people. The most popular social network among the Kazakhs was VKontakte, which 1,945 million users are using. Most of the social network audience „VKontakte” is people under 18 years. Also it can be noted that in Kazakhstan the social network Instagram is gaining popularity. The service is used by 1,336 million Kazakhstanis. Facebook's social network in Kazakhstan is used by 125,8 thousand people, most of them women-60,3%. It is noteworthy that there is a small percent of users under the age of 18-they are only 0,1 percent. The basis of the audience consists of people from 25 to 34 years-their 45.4 percent.<sup>17</sup>

Kazakh state institutions are also increasing their presence in the Internet. The president Kazakhstan got the first website and the presidential blog. In 2012 president joined Facebook and Twitter, in 2014 he also joined the Instagram. Today all federal ministries, departments and other state authorities have their own websites. The Ministry of Foreign Affairs of the Republic of Kazakhstan provides an opportunity for all those who wish to follow the current events of foreign policy in social networks, in particular using Facebook and Twitter sites.

---

<sup>16</sup> *Internet Live Stats*, retrieved from [www.internetlivestats.com](http://www.internetlivestats.com), accessed in 20.02.2018.

<sup>17</sup> How many people „sitting” in social networks in Kazakhstan? *Tengri News*, 2016, retrieved from [www.tengrinews.kz](http://www.tengrinews.kz), accessed in 28.01.2018.

According to Digital Diplomacy Review Kazakhstan is on 44<sup>th</sup> place around the globe (in 2016 Kazakhstan was on the 38<sup>th</sup> place)<sup>18</sup>. The review is realized by using both qualitative and quantitative data produced by M. F. A.s. Providing an in-depth analysis of publicly open digital diplomacy assets, this survey examines websites, mobile apps and social networks and the ways in which they are used to conduct digital diplomacy affairs. It represents the stages of progress from a beginner to advanced degree of digital diplomacy practice at corporate level: Presence, Customization, Up-to-dateness, Engagement, and Diplomacy. Moreover, it analyzes qualitative signifiers such as creativity and authenticity, transparency, content-management, security, openness, influence, type of audience, professionalism, disruptive/innovative campaigns.

It is also noted, that among the C. I. S. countries in the ranking Kazakhstan only behind Russia, which is ranked fourth. The rating of digital diplomacy led the United Kingdom, followed by the United States and by France. Kyrgyzstan is on the 96<sup>th</sup> and Uzbekistan is in the 124<sup>th</sup> places of the chart.<sup>19</sup>

All these three countries' M. F. A.s have social media accounts on several platforms. Moreover, some Embassies of these countries also have S. M. accounts. For example, Uzbekistan Embassies in London, Brussels and Singapore have accounts on Twitter. Kyrgyzstan's Embassies in Uzbekistan, U. S. A. and Belgium as well have Twitter accounts. In terms of Kazakhstan, Embassies of this country run social media accounts in Twitter in 20 countries and in Facebook 28 countries. But not all of them are active on S. M. We would like to examine several social media accounts running by MFAs of Kazakhstan, Uzbekistan and Kyrgyzstan in terms of activity and engagement.

In Uzbekistan, the percentage of the population present on the Internet in 2016 was 51% (almost 15,5 million users), which is quite high for the countries of Central Asia.<sup>20</sup>

There is a lack of fresh statistics, illuminating the preferences of users of social networks of the country. The latest informations is dated 2016. According to the available information, Uzbeks preferred such social networks:

---

<sup>18</sup> *Digital Diplomacy Review*, 2017, retrieved from [www.digital.diplomacy.live](http://www.digital.diplomacy.live), accessed in 28.01.2018.

<sup>19</sup> In the rating of digital diplomacy, Kyrgyzstan outstripped China, but lagged behind Uganda, *Sputnik*, 2016, retrieved from [www.ru.sputnik.kg](http://www.ru.sputnik.kg), accessed in 27.01.2018.

<sup>20</sup> *Internet Live Stats*, retrieved from [www.internetlivestats.com](http://www.internetlivestats.com), accessed in 20.02.2018.



- 1) My world [Moy mir](Mail.ru);
- 2) Classmates[Odnoklassniki];
- 3) In Contact [VKontakte].<sup>21</sup>

At the same time, despite the popularity of these social networks, there were appeals to create their own social network as alternatives to Facebook or to „Classmates”.<sup>22</sup> According to rough estimates, there were 38 social networks in the country, of which only 8 partially worked. All these actions were carried out with the aim of limiting the activities of social networks in Uzbekistan. The official position of the authorities is: „*Protection of young people from the negative effects of foreign ideas and movements is a priority. These ideas are spread mainly through foreign social networks*”.<sup>23</sup> One of the biggest threats is the recruitment of young users in the ranks of the I. S. I. S. and I. M. U. (Islamic Movement of Uzbekistan).

Despite such a policy, diplomatic departments of Uzbekistan try to keep up with their foreign colleagues and remain in the trend. The Ministry of Foreign Affairs of Uzbekistan has accounts on Facebook and on YouTube. The Embassy of the Republic of Uzbekistan in Ukraine also has pages in Facebook, but similar diplomatic institutions in Poland, Russia, England, Germany, Japan, Egypt, Spain hasn't.

Such closeness to public and digital diplomacy instruments is confirmed in the Digital Diplomacy Review for 2017-the country was on the 133<sup>d</sup> position out of 209. In 2016, Uzbekistan was on the 124<sup>th</sup> position.<sup>24</sup>

As for Kyrgyzstan, the population of this country also actively uses the Internet and social networks. Analysis of Internet Live Stats for 2016 showed that Kyrgyzstan is on the 106<sup>th</sup> place in the ranking of countries by the number of Internet users. The number of users among the country's population is just over 2 million people, or 34,4%. And although this indicator is lower than in Kazakhstan. But the number of users is steadily increasing, which is shown by statistics.<sup>25</sup>

According to data for 2017, the majority of Internet users is the young population of the country between the ages of 18 and 35, with higher education. 12% of the Kyrgyz population uses the Internet daily.

---

<sup>21</sup> *The most popular social network in Uzbekistan become „My World”, Sputnik*, 2016, retrieved from [www.ru.sputniknews-uz.com](http://www.ru.sputniknews-uz.com), accessed in 21.02.2018.

<sup>22</sup> *Donn with Facebook! How Uzbekistan fights the threats of social networks*, 2016, retrieved from [www.365info.kz](http://www.365info.kz), accessed in 21.02.2018.

<sup>23</sup> *Ibidem*.

<sup>24</sup> *Digital Diplomacy Review*, 2017, retrieved from [www.digital.diplomacy.live](http://www.digital.diplomacy.live), accessed in 21.02.2018.

<sup>25</sup> *Internet Live Stats*, retrieved from [www.internetlivestats.com](http://www.internetlivestats.com), accessed in 20.02.2018.

Men less often use social networks of the Internet, rather than women. Among the most popular social networks in Kyrgyzstan are the following:

- 1) Classmates[Odnoklassniki];
- 2) Facebook;
- 3) Instagram;
- 4) In Contact [VKontakte];
- 5) My world [Moy Mir](Mail.ru);
- 6) Twitter.<sup>26</sup>

Despite the growing number of Internet users at the beginning of 2018, there was a question of limiting the influence of social networks on the territory of Kyrgyzstan. The initiator of innovation was Ulan Primov: He said: *„Verified, unverified information is published there, social networks are spreading information capable of undermining international consent, contrary to national interests ... it is necessary to introduce a bill providing for the consideration of social networks, as mass media, or what is a limitation”*.<sup>27</sup> These changes, first of all, should regulate the issues of publishing in the media and social networks a refutation of information discrediting the honor and dignity of a person.

According to the Digital Diplomacy Review for the year 2017, Kyrgyzstan ranked 137<sup>th</sup> in the ranking of countries using digital diplomacy tools.<sup>28</sup>

With regard to the use of social networks in the work of diplomats in Kyrgyzstan, it should be noted that many embassies and consulates of the country have pages in social networks and try to actively interact with a wide range of public. For example, the Embassy of the Kyrgyz Republic in the Russian Federation in 2016 initiated a weekly informing in social network of users about the activities of the Consular Section.<sup>29</sup> In addition, the Embassy also has an account in the social network Facebook.

As for the country's main diplomatic institution, the Ministry of Foreign Affairs of Kyrgyzstan, it has accounts on such social networks as

---

<sup>26</sup> *Social networks in the life of Kyrgyz people*, Information Analytical Agency „Kabar”, 2017, retrieved from [www.kabar.kg](http://www.kabar.kg), accessed in 20.02.2018.

<sup>27</sup> *How to curb social networks?*, Radio „Azattuk”, 2018, retrieved from [www.rus.azattyk.org](http://www.rus.azattyk.org), accessed in 20.02.2018.

<sup>28</sup> *Digital Diplomacy Review*, 2017, retrieved from [www.digital.diplomacy.live](http://www.digital.diplomacy.live), accessed in 20.02.2018.

<sup>29</sup> Embassy of the Kyrgyz Republic in the Russian Federation, retrieved from [www.kyrgyzembassy.ru](http://www.kyrgyzembassy.ru), accessed in 20.02.2018.

Facebook, Twitter, VKontakte and even YouTube, which undoubtedly testifies to the active implementation of digital diplomacy tools.

## Conclusion

The purpose of this article was to define the concept of public diplomacy in their diverse, often paradoxical comprehensions, to at least slightly introduce approaches to understanding of public diplomacy, while at the same time indicating modern trends in the revolution of public diplomacy, particularly development of digital diplomacy.

It is important to understand that information technology can transform and change, but it is one of the key technology products in today's society. That is why government agencies, including those whose functions are related to foreign countries it is important not to delay their development in the long box.

Currently, the Internet is actively used by Kazakhstan, Uzbekistan and Kyrgyzstan as an instrument of foreign policy and diplomacy, a means of strengthening soft power, increasing the attractiveness of the image of the country. Undoubtedly, all these countries strive to strengthen their positions in the international arena, which requires them to make more efforts in the fields of digital and public diplomacy.

Being the driving force of the processes of globalization, which are ambiguous in nature, the Internet opens new perspectives for the society and state structures. The global network can serve the task of building up its soft power and forming a positive image of countries in the international arena,<sup>30</sup> popularizing their rich cultural heritage, strengthening ties in the spheres of economy, law, culture, science, medicine, as well as supporting the multicultural policy of states.<sup>31</sup>

With such an understanding of Kazakhstan's policy objectives in the information space of digital diplomacy can be an instrument of good promotion of our national interests on the world stage-provided that the investment in it sufficient intellectual, technological and organizational resources. Kazakhstan has the resources available, but most of them are scarce is time. For this reason, the activation state agencies efforts in the

---

<sup>30</sup> J. Nikolaeva, N. Bogoliubova, V. Fokin, V. Baryshnikov, P. Klevtsov, E. Eltc, „Cultural mega-events as an international, cultural, and political tool”, in *Codrul Cosminului*, no. 23/2, 2017, pp. 293-306.

<sup>31</sup> V. Fokin, V. Baryshnikov, N. Bogoliubova, J. Nikolaeva, I. Ivannikov, M. Portnyagina, N. Ryazantseva, E. Eltc, I. Chernov, „Multiculturalism in the Modern World”, in *International journal of environmental & science education*, no. 11 (18), 2016, pp. 10777 -10787.

area under consideration should be considered as a priority for the near future.