**Project Title: Articulatory errors in adolescents and young adults with cerebral palsy: An acoustic and perceptual analysis**

**Information Sheet for Participants (age ≥18 years)**

Dear Sir/Madam,

My name is Dr. [fill in name here] and I am a Researcher in the Department of Speech and Communication at the University of [fill in name here]. We would like to invite you to take part in above-mentioned project, which is funded by the [fill in name here] Funding Organisation. We have obtained approval from the Research Ethics Committee of the University of [fill in name here] for delivering this project.

**What is this study about?**

This study aims to investigate the speech sounds produced by adolescents and young adults with cerebral palsy and compare their data to that of those without any neurological issues. We will also have an independent group of listeners to listen to the audio-recordings of the speech data and tell us what they find difficult to understand.

**Benefits of this study**

The findings of this study will help to develop speech therapy methods that will improve pronunciation in people with cerebral palsy, which could potentially lead to better long-term outcomes that involve communication e.g., employment, socialisation, and independence.

**Participants of this study**

We are looking for 20 speakers aged 10-20 years with cerebral palsy and 20 other speakers of the same age who do not have cerebral palsy. All participants must also have typical visual and hearing abilities (as determined by a hearing and vision screen; see below) and speak English as their first language. You are invited to take part because you are either a member of the community of young speakers with cerebral palsy, or as a control. If you have relevant medical records that you are willing to share, please bring them with you to our first meeting.

**What will you have to do?**

This is a once off data collection activity that will be delivered by one of our Research Assistants, [fill in name here] and [fill in name here] (both have Garda vetting), in a clinic room in our Department. The activity will include: (1) a hearing and vision screen; (2) a short language skills assessment; and (3) experimental tasks such as saying some vowels, reading some words and sentences, and an informal conversation about interesting activities. The speech produced by you during these tasks will be audio-recorded using a digital recorder. With your consent, your performance of these tasks will be video-recorded as well. The entire activity will take approximately 1.5 hours.

**What will we do with your data?**

When the tasks are completed, an independent group of listeners will be asked to listen to the audio data and tell us what they find difficult to understand. These listeners will not be told the identity of the speakers. The audio and video recordings will also be analyzed by the present research team members, generating data about timing and frequencies in the speech.

The findings will be presented at professional conferences, seminars/lectures for educational purposes, and published in peer-reviewed academic Journals. In oral presentations of the research findings, we may play some speech samples for the purpose of showing the speech difficulties experienced by individuals with cerebral palsy. However, no identifying information of any participants will be mentioned (except the age, gender, and description of the nature of the speech difficulties) in any of these research outputs.

**How will we handle your data?**

All of the data we collect will be anonymized, which means the data is not associated with the participant’s name. Instead, we use numbers to identify participants. It is unlikely, but possible, that someone who knows you might identify you based on listening to the audio data. Any video data will be blurred to aid anonymity. No one will be able to identify a speaker from the frequency and duration data.

While we work on the project and for 10 years afterwards, the data will be stored securely on a University of [fill in name here] Microsoft OneDrive that no one but the present researchers will be able to access. Data analysis described above will be carried out on our encrypted and password protected computers to ensure data security. When the project is finished, all written records will be scanned and turned into electronic format to be stored in OneDrive as well. The hard copies of the records will then be shreded.

In addition to the above-stated data storage that is required by the Research Ethics Committee, we would like to ask for your consent to allow us to share with other researchers the audio-recordings of your speech. The reason for data sharing is to support the principles of Open Science, where knowledge should be transparent and accessible. To achieve that, we plan to archive the data with DELAD – Database Enterprise for Language and speech Disorders (<http://delad.net/>). DELAD is a network that aims to provide a channel for researchers to share corpora of speech of individuals with communication disorders with educators and researchers. It has linked up with the Knowledge Centre for Atypical Communication Expertise (<https://ace.ruhosting.nl/>), a K-centre of CLARIN (Common Language Resources and Technology Infrastructure; <https://www.clarin.eu/>) for archiving and sharing the speech corpora through The Language Archive (<https://archive.mpi.nl/tla/>).

**Asking questions and/or taking part**

Your participation is entirely voluntary and in case you change your mind, you have the right to withdraw your participation up to the point of data anonymization.

If you have any questions about this study, or are interested in taking part, please do not hesitate to contact one of our Research Assistants, or the Principal Investigator (see contact detail below). If you are taking part, please complete the Consent form enclosed and bring it with you when you attend the research activity session.

Thank you for taking the time to read this Information Sheet!

|  |  |  |
| --- | --- | --- |
| [fill in name here]  Email: [email address]  Office Tel.: [Phone number] | [fill in name here]  Email: [email address]  Office Tel.: [Phone number] | Dr. [fill in name here]  Email: [email address]  Office Tel.: [Phone number] |

**Project Title: Articulatory errors in adolescents and young adults with cerebral palsy: An acoustic and perceptual analysis**

**Consent Form for Participants (age ≥18 years)**

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (D.O.B.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_), consent to participating in the above-mentioned study.

* The purpose and nature of the study has been explained to me in writing.
* I am participating voluntarily.
* I give permission for all research tasks administered to be audio-recorded.
* I understand that if I change my mind, I can withdraw from the study, whether before it starts, during participation, or up to the point of data anonymization.
* I understand that anonymity will be ensured at all times and that only age and gender of participants will be available in any research output of this project such as conference presentations or research papers. The audio and video recordings may be used in a presentation or at a conference, but no identifying information will be provided. Faces will be blurred in videos.
* I give permission for me to be video-recorded for some tasks.

Yes  No

* I give permission for my data to be archived with DELAD as explained in the information sheet. I understand that archived data may be analyzed by other researchers.

Yes  No

Participant Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name in Block Capitals: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contact Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Project Title: Articulatory errors in adolescents and young adults with cerebral palsy: An acoustic and perceptual analysis**

**Information Sheet for Parents/Guardians (of participants age <18 years)**

Dear Parents/Caregivers,

My name is Dr. [fill in name here] and I am a Researcher in the Department of Speech and Communication at the University of [fill in name here]. We would like to invite your child to take part in above-mentioned project, which is funded by the [fill in name here] Funding Organisation. We have obtained approval from the Research Ethics Committee of the University of [fill in name here] for delivering this project.

**What is this study about?**

This study aims to investigate the speech sounds produced by adolescents and young adults with cerebral palsy and compare their data to that of those without any neurological issues. We will also have an independent group of listeners to listen to the audio-recordings of the speech data and tell us what they find difficult to understand.

**Benefits of this study**

The findings of this study will help to develop speech therapy methods that will improve pronunciation in people with cerebral palsy, which could potentially lead to better long-term outcomes that involve communication e.g., employment, socialisation, and independence.

**Participants of this study**

We are looking for 20 speakers aged 10-20 years with cerebral palsy and 20 other speakers of the same age who do not have cerebral palsy. All participants must also have typical visual and hearing abilities (as determined by a hearing and vision screen; see below) and speak English as their first language. Your child is invited to take part because they are either a member of the community of young speakers with cerebral palsy, or as a control. If you have relevant medical records that you are willing to share, please bring them with you to our first meeting.

**What will your child have to do?**

This is a once off data collection activity that will be delivered by one of our Research Assistants, [fill in name here] and [fill in name here] (both have Garda vetting), in a clinic room in our Department. The activity will include: (1) a hearing and vision screen; (2) a short language skills assessment; and (3) experimental tasks such as saying some vowels, reading some words and sentences, and an informal conversation about interesting activities. The speech produced by your child during these tasks will be audio-recorded using a digital recorder. With your consent, your child’s performance of these tasks will be video-recorded as well. The entire activity will take approximately 1.5 hours.

**What will we do with your child’s data?**

When the tasks are completed, an independent group of listeners will be asked to listen to the audio data and tell us what they find difficult to understand. These listeners will not be told the identity of the speakers. The audio and video recordings will also be analyzed by the present research team members, generating data about timing and frequencies in the speech.

The findings will be presented at professional conferences, seminars/lectures for educational purposes, and published in peer-reviewed academic Journals. In oral presentations of the research findings, we may play some speech samples for the purpose of showing the speech difficulties experienced by individuals with cerebral palsy. However, no identifying information of any participants will be mentioned (except the age, gender, and description of the nature of the speech difficulties) in any of these research outputs.

**How will we handle your child’s data?**

All of the data we collect will be anonymized, which means the data is not associated with the participant’s name. Instead, we use numbers to identify participants. It is unlikely, but possible, that someone who knows your child might identify them based on listening to the audio data. Any video data will be blurred to aid anonymity. No one will be able to identify a speaker from the frequency and duration data.

While we work on the project and for 10 years afterwards, the data will be stored securely on a University of [fill in name here] Microsoft OneDrive that no one but the present researchers will be able to access. Data analysis described above will be carried out on our encrypted and password protected computers to ensure data security. When the project is finished, all written records will be scanned and turned into electronic format to be stored in OneDrive as well. The hard copies of the records will then be shreded.

In addition to the above-stated data storage that is required by the Research Ethics Committee, we would like to ask for your consent to allow us to share with other researchers the audio-recordings of your child’s speech. The reason for data sharing is to support the principles of Open Science, where knowledge should be transparent and accessible. To achieve that, we plan to archive the data with DELAD – Database Enterprise for Language and speech Disorders (<http://delad.net/>). DELAD is a network that aims to provide a channel for researchers to share corpora of speech of individuals with communication disorders with educators and researchers. It has linked up with the Knowledge Centre for Atypical Communication Expertise (<https://ace.ruhosting.nl/>), a K-centre of CLARIN (Common Language Resources and Technology Infrastructure; <https://www.clarin.eu/>) for archiving and sharing the speech corpora through The Language Archive (<https://archive.mpi.nl/tla/>).

**Asking questions and/or taking part**

Your participation is entirely voluntary and in case you or your child change your mind, you have the right to withdraw your participation up to the point of data anonymization.

If you have any questions about this study, or are interested in letting your child to take part, please do not hesitate to contact one of our Research Assistants, or the Principal Investigator (see contact detail below). If your child is taking part, please complete the two forms enclosed (a Consent Form for parents/caregivers, and an Assent form for your child) and bring them with you when you and your child attend the research activity session.

Thank you for taking the time to read this Information Sheet!

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| --- | --- | --- |
| [fill in name here]  Email: [email address]  Office Tel.: [Phone number] | [fill in name here]  Email: [email address]  Office Tel.: [Phone number] | Dr. [fill in name here]  Email: [email address]  Office Tel.: [Phone number] |

**Project Title: Articulatory errors in adolescents and young adults with cerebral palsy: An acoustic and perceptual analysis**

**Consent Form for Parents/Guardians (of participants age <18 years)**

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, consent to my child \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (D.O.B.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) participating in the above-mentioned study.

* The purpose and nature of the study has been explained to me in writing.
* My daughter/son is participating voluntarily.
* I give permission for all research tasks administered to be audio-recorded.
* I understand that if I change my mind, I can withdraw from the study, whether before it starts, during participation, or up to the point of data anonymization.
* I understand that anonymity will be ensured at all times and that only age and gender of participants will be available in any research output of this project such as conference presentations or research papers. The audio and video recordings may be used in a presentation or at a conference, but no identifying information will be provided. Faces will be blurred in videos.
* I give permission for my child to be video-recorded for some tasks.

Yes  No

* I give permission for my child’s data to be archived with DELAD as explained in the information sheet. I understand that archived data may be analyzed by other researchers.

Yes  No

Parent/Guardian Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name in Block Capitals: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contact Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Project Title: Articulatory errors in adolescents and young adults with cerebral palsy: An acoustic and perceptual analysis**

**Information Sheet for Children Participants (age <18 years)**

Hello! My name is Dr. [fill in name here] and I am a Researcher at the University of [fill in name here]. We would like to invite you to take part in a project. The project has been approved by the Research Ethics Committee of our University.

**What is this study about?**

We want to study how adolescents and young adults with cerebral palsy produce speech sounds and to compare that to the speech sounds produced by others without the condition. We will also have a group of people to listen to the speech sounds and tell us what they find difficult to understand.

**Benefits of this study**

We hope that this study will help us develop speech therapy methods that will improve pronunciation in people with cerebral palsy, so that this will improve their communication in work and with friends.

**Participants of this study**

We are looking for 20 people aged 10-20 years with cerebral palsy and 20 other speakers of the same age who do not have cerebral palsy. All participants must also have typical visual and hearing abilities and speak English as their first language. If you have relevant medical records that you are willing to share, please bring them with you to our first meeting.

**What will you have to do?**

This is a once off activity to be done with one of our Research Assistants, [fill in name here] and [fill in name here], in a clinic room in our Department. The activity will include: (1) a hearing and vision test; (2) a short language test; and (3) tasks such as saying some sounds, reading some words and sentences, and a conversation about interesting activities. Your speech during these tasks will be audio-recorded using a digital recorder. If it is ok with you, we will also video-record you. The activity will take about 1.5 hours.

**What will we do with your data?**

When the tasks are finished, a group of people will be asked to listen to the recordings and tell us what they find difficult to understand. These listeners will not be told who the speakers are. B, C and I will also analyze the audio and video recordings.

The findings will be presented at meetings and classes or lectures, and published in professional Journals. During the classes or lectures, we may play some speech samples for the purpose of showing the speech difficulties experienced by individuals with cerebral palsy. However, we will not mention who the speakers are (except the age, gender, and description of the nature of the speech difficulties) in any of these activities.

**How will we handle your data?**

We will use numbers to refer to all participants in our records. We will not use your names. It is unlikely, but possible, that someone who knows you might identify you based on listening to the audio data. Any video data will be blurred to aid anonymity. No one will be able to identify who you are from the results which are numbers.

While we work on the project and for 10 years afterwards, the data will be stored securely on a University of [fill in name here] Microsoft OneDrive that no one but us will be able to access. Data analysis will be carried out on our computers where passwords are needed. When the project is finished, all written records will be scanned and turned into electronic format to be stored in OneDrive as well. The hard copies of the records will then be shreded.

In addition, we would like to ask you to allow us to share with other researchers the audio-recordings of your speech. The reason for data sharing is to support Open Science, where knowledge should be transparent and accessible. To do that, we plan to archive the data with DELAD – Database Enterprise for Language and speech Disorders (<http://delad.net/>). DELAD is a network that aims to provide a channel for researchers to share corpora of speech of individuals with communication disorders with educators and researchers. It has linked up with the Knowledge Centre for Atypical Communication Expertise (<https://ace.ruhosting.nl/>), a K-centre of CLARIN (Common Language Resources and Technology Infrastructure; <https://www.clarin.eu/>) for archiving and sharing the speech corpora through The Language Archive (<https://archive.mpi.nl/tla/>).

**Asking questions and/or taking part**

Your participation is entirely voluntary and in case you change your mind, you have the right to withdraw your participation up to the point of data anonymization.

If you have any questions about this study, or are interested in taking part, please do not hesitate to contact one of our Research Assistants, or the Principal Investigator (see contact detail below). If you are taking part, please complete the Consent form enclosed and bring it with you when you attend the research activity session.

Thank you for taking the time to read this Information Sheet!

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| --- | --- | --- |
| [fill in name here]  Email: [email address]  Office Tel.: [Phone number] | [fill in name here]  Email: [email address]  Office Tel.: [Phone number] | Dr. [fill in name here]  Email: [email address]  Office Tel.: [Phone number] |

**Project Title: Articulatory errors in adolescents and young adults with cerebral palsy: An acoustic and perceptual analysis**

**Assent Form for Children Participants (age <18 years)**

|  |  |  |
| --- | --- | --- |
| You can tick where you agree: |  | ✓ |
| 1. The project has been explained to me. | Image result for thumbs up |  |
| 1. I understand what I will have to do, and I am happy to do these jobs. | A picture containing text, clipart  Description automatically generated |  |
| 1. I understand we are going to meet once to do the tasks together. | A picture containing text, clipart  Description automatically generated |  |
| 1. I am happy to be audio-recorded. | Icon  Description automatically generated |  |
| 1. I am happy to be video-recorded. | Icon  Description automatically generated |  |
| 1. I am ok for my data to be stored with DELAD, so that other researchers can work on it. | A picture containing text, clipart  Description automatically generated |  |
| 1. I understand that I can ask questions at any time. | http://www.proprofs.com/flashcards/upload/a851821.gif |  |
| 1. I don’t have to keep going if I don’t want to. | http://www.ospkzn.com/stop.jpg |  |

My Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

My Name in Capital Letters: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Project Title: Articulatory errors in adolescents and young adults with cerebral palsy: An acoustic and perceptual analysis**

**Information Sheet for Listeners**

Dear Sir/Madam,

My name is Dr. [fill in name here] and I am a Researcher in the Department of Speech and Communication at the University of [fill in name here]. We would like to invite you to take part in above-mentioned project, which is funded by the [fill in name here] Funding Organisation. We have obtained approval from the Research Ethics Committee of the University of [fill in name here] for delivering this project.

**What is this study about?**

This study aims to investigate the speech sounds produced by adolescents and young adults with cerebral palsy and compare their data to that of those without any neurological issues. We will also have an independent group of listeners to listen to the audio-recordings of the speech data and tell us what they find difficult to understand.

**Benefits of this study**

The findings of this study will help to develop speech therapy methods that will improve pronunciation in people with cerebral palsy, which could potentially lead to better long-term outcomes that involves communication e.g., employment, socialisation, and independence.

**Participants of this study**

We are looking for 20 volunteers aged 18 years or above to take part in this study as the listeners. They will have to be native speakers of English and have typical hearing abilities as determined by a hearing screen (see below).

**What will you have to do?**

This is a once off data collection activity that will be delivered by one of our Research Assistants, [fill in name here] and [fill in name here], in a sound-proof room in our Department. The activity will include: (1) a hearing screen; and (2) a listening task. The listening task, which contains a total of 132 short sentences, will be presented using a software on a laptop and a headphone. The listeners will listen to each of them and give an estimate on how many percent of the sentence sounds difficult to understand. The responses will be automatically recorded by the same software. The entire activity will take approximately 2 hours and listeners can take a break whenever they need.

**What will we do with your data?**

The numerical data obtained will be analyzed and summarized. The findings will be presented at professional conferences, seminars/lectures for educational purposes, and published in peer-reviewed academic Journals. However, no identifying information of any participants will be mentioned (except the listeners’ mean age and range, and the number of male and female listeners on the panel gender) in any of these research outputs.

**How will we handle your data?**

All of the data we collect will be anonymized, which means the data is not associated with the participant’s name. Instead, we use numbers to identify participants. While we work on the project and for 10 years afterwards, the data will be stored securely on a University of [fill in name here] Microsoft OneDrive that no one but the present researchers will be able to access. Data analysis described above will be carried out on our encrypted and password protected computers to ensure data security. When the project is finished, all written records will be scanned and turned into electronic format to be stored in OneDrive as well. The hard copies of the records will then be shreded.

In addition to the above-stated data storage that is required by the Research Ethics Committee, we would like to ask for your consent to allow us to share with other researchers the responses that you gave for each sentence. The reason for data sharing is to support the principles of Open Science, where knowledge should be transparent and accessible. To achieve that, we plan to archive the data, together with the audio and video data (with the speakers and their guardian’s permission), with DELAD – Database Enterprise for Language and speech Disorders (<http://delad.net/>). DELAD is a network that aims to provide a channel for researchers to share corpora of speech of individuals with communication disorders with educators and researchers. It has linked up with the Knowledge Centre for Atypical Communication Expertise (<https://ace.ruhosting.nl/>), a K-centre of CLARIN (Common Language Resources and Technology Infrastructure; <https://www.clarin.eu/>) for archiving and sharing the speech corpora through The Language Archive (<https://archive.mpi.nl/tla/>).

**Asking questions and/or taking part**

Your participation is entirely voluntary and in case you change your mind, you have the right to withdraw your participation up to the point of data anonymization.

If you have any questions about this study, or are interested in taking part, please do not hesitate to contact one of our Research Assistants, or the Principal Investigator (see contact detail below). If you are taking part, please complete the Consent form enclosed and bring it with you when you attend the research activity session.

Thank you for taking the time to read this Information Sheet!

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| --- | --- | --- |
| [fill in name here]  Email: [email address]  Office Tel.: [Phone number] | [fill in name here]  Email: [email address]  Office Tel.: [Phone number] | Dr. [fill in name here]  Email: [email address]  Office Tel.: [Phone number] |

**Project Title: Articulatory errors in adolescents and young adults with cerebral palsy: An acoustic and perceptual analysis**

**Consent Form for Listeners**

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (age: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_), consent to participating in the above-mentioned study.

* The purpose and nature of the study has been explained to me in writing.
* I am participating voluntarily.
* I understand that if I change my mind, I can withdraw from the study, whether before it starts, during participation, or up to the point of data anonymization.
* I understand that anonymity will be ensured at all times and that only age and gender of participants will be available in any research output of this project such as conference presentations or research papers.
* I give permission for my data to be archived with DELAD as explained in the information sheet. I understand that archived data may be analyzed by other researchers.

Yes  No

Participant Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name in Block Capitals: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_