1 Auditory.Solutions: Dichotic/headphones online screening

DISCLAIMER: The dichotic (and headphones) screening performed by our service does not collect any demographics from the participant – it is only conducting the screening. Also, our service is not presenting any Consent Form – you should handle that within your part of the experiment before directing the participant to our screening webpage. It is your responsibility to review our screening webpage thoroughly.

2 Screening service – access and navigation

The internet location of the dichotic/headphones online screening service is at the following web address:

https://Auditory.Solutions



Dichotic/headphones Screening Solution for online crowd-sourced studies

There are two simple ways of using our screening service: automatic and semi-automatic.

For more details click here: How it works?

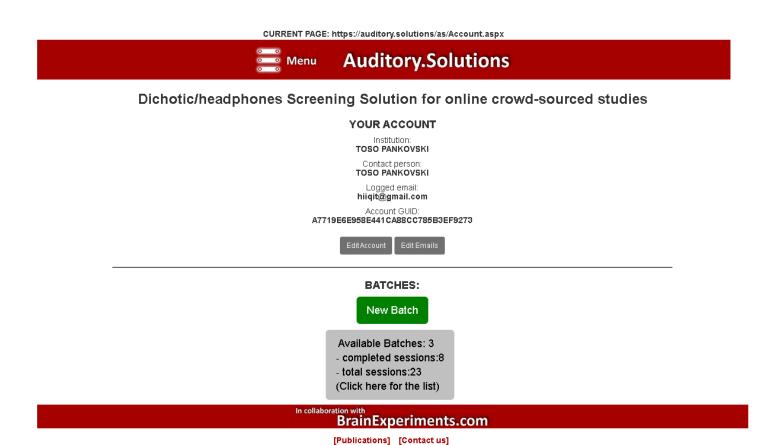
Based on our Ethics approved study https://jcaa.caa-aca.ca/index.php/jcaa/article/view/3403



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3 Registration and login

We expect your team to have a single registration (account). However, multiple researchers' emails can be associated with the account. A contact person with her/his email address must be specified during the registration, and a virtually unlimited number of other researcher's emails can be added through the [Edit Emails] button at a later time:



You cannot delete the last email on the account (the system will not let you). So if you need to delete the last email, you have to add another email first and then delete the email you wanted to delete.

4 Batches

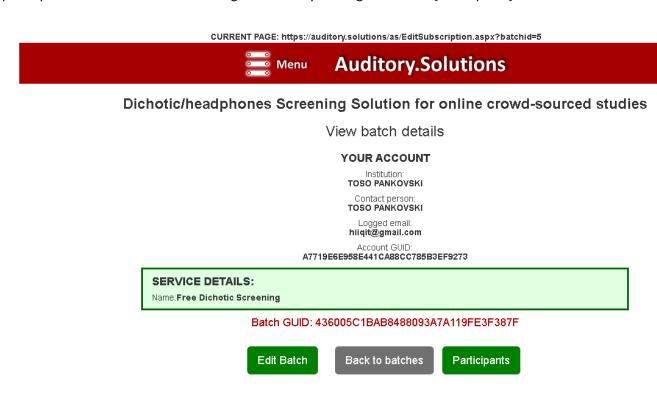
In order to perform screening for dichotic auditory context (and headphones), you should create a batch. You may create as many batches as you want. When creating a batch, you must specify:

- Batch Title: A batch title (optional), so you can easily recognize your batch in the batch list.
- What should happen after the participant finishes her/his screening:
 - Show a final message and stop and type in the message. For example: "This part of the screening has ended. Please contact the researched on the email researcher03@MyInstitution.com". We expect this option to be rarely used since if you are performing an online/crowdsourced study, you probably are conducting it through a website in such a case, the "Call back to an URL" option is more appropriate than the "Final message" option.
 - Call back to an URL (webpage) of your choice and type in the URL. This is preferable if your study is performed through a website on which you are conducting your experiment, and you want the participant to be automatically transferred to continue with your experiment. Our system will append the participant ID and the result of the dichotic screening to the URL you specified here. For example, suppose you specify "http://MyExperiment.com/continue" as an URL. In that case, the participant will be transferred to the URL "http://MyExperiment.com/continue?ParticipantID=PPPPP&Result=RRRRR" where "PPPPP" is a 32-character Global Unique Identifier (unique across all participants in all your batches, generated by the Auditory.Solutions system at the time of the creation of your batch), and

"RRRRR" is the result of the screening, having three values: **Y** (means dichotic), **N** (means non-dichotic), and **D** (means disqualified, or cannot be determined). Your system (the web page specified by your URL) should accept the ParticipantID and the Result and continue your experiment accordingly.

 The number of units (screenings) in your batch. You cannot have more than 10,000 (ten thousand) of screening per batch at this version of our service. If you need a larger number of screenings, please create multiple batches.

If you have selected the option <u>Call back to an URL</u>, our system will transfer the participant to the URL you specified for the batch after the screening, along with the Participant ID and the screening result. However, after the experiment, for security purposes (avoidance of tempering with the result), we recommend validating that result within the list of the participants and their results. You can get that list by clicking the button [Participants] when on the Batch screen:



5 Participants and Results

After clicking the [Participants] button when on the Batch webpage, you will get a list of all the Participant ID-s created for you by Auditory. Solutions at the moment you created the batch. For example, suppose you updated your batch by increasing the requested screening sessions from Old_Number to New_Number. In that case, the system will preserve the original (Old_Number) Participant ID-s, adding new New_Number minus Old_Number Participant ID-s. If the New_Number is smaller than the Old_Number (you are decreasing the number of screening sessions), the system will delete Old_Number minus New_Number from the existing Participant ID-s. Consequently, the system will always keep the number of available Participant ID-s for the batch equal to the requested screening sessions.

Note that no screenings will be lost in the latter case (when the system deletes certain Participant ID-s). This is due to the rule that you can edit (change) your batch details only while you have not started the screenings with the Participant ID-s of that batch. As soon as the first screening with a Participant ID of the batch is completed, the editing/changing of the batch will not be allowed. Therefore, if you need to make changes to a batch that you already started having screening for its Participant ID-s, you better stop the screening of that batch and continue by creating a new batch.

The list of the Participant ID-s may be very long (up to 10000 records). Therefore, when loading the Participant ID list of a batch with a large number of requested screenings, please be patient and make sure the webpage has been fully loaded before trying to scroll it. Nothing dangerous will happen even if you do; only the scrolling experience may not be the best, depending on the browser you use).

The list of Participant ID-s contains the following columns:

 ${\tt CURRENT\ PAGE:\ https://auditory.solutions/as/Results.aspx?batchID=5}$



Auditory.Solutions

Dichotic/headphones Screening Solution for online crowd-sourced studies

Account GUID = A7719E6E958E441CA88CC785B3EF9273

Batch GUID = 436005C1BAB8488093A7A119FE3F387F

	Back to the batch		
#	Participant ID	Screening URL	Result
1	F28C89ED2A644264AE9599E83E4FF4FF	(completed)	
2	C31F31BA940748BD966C4C7ED172B91E	(completed)	Non-dichotic
3	98515A387D594FAA848BDC66253F6565	(completed)	Non-dichotic
4	8397DB54E1534444A9B8604015277CF5	(completed)	Non-dichotic
5	6D3E40B256784F1E9C6B20705370AA3F	https://auditory.solutions/as/screen.aspx?	
		ParticipantID=6D3E40B256784F1E9C6B20705370AA3F	
6	5CE5B8D5C5D64E9487174E75E9B73F91	https://auditory.solutions/as/screen.aspx?	
		ParticipantID=5CE5B8D5C5D64E9487174E75E9B73F91	
7	5823C2798A9C44FA8C3212DE6D936B49	https://auditory.solutions/as/screen.aspx?	
		ParticipantID=5823C2798A9C44FA8C3212DE6D936B49	
8	2A97C30AD478437699FD96CD3C97A307	https://auditory.solutions/as/screen.aspx?	
		ParticipantID=2A97C30AD478437699FD96CD3C97A307	
9	1955818DEC1447BF93871125A041729C	https://auditory.solutions/as/screen.aspx?	
		ParticipantID=1955818DEC1447BF93871125A041729C	
10	05A4638DA6C0412686D3B733984B6D16	https://auditory.solutions/as/screen.aspx?	
		ParticipantID=05A4638DA6C0412686D3B733984B6D16	
Back to the batch			

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- 1. Order number ("#") in the list. The list is ordered by the following criteria:
 - a. On the top are the completed screenings, ordered by Participant ID in alphanumerical descending order;
 - b. On the bottom are the uncompleted screenings, ordered by Participant ID in alphanumerical descending order:

The Order Number has no relation to the Participant ID of the same record and may (and will) change after each completed screening. Therefore, you should not base anything on the Order Number ("#").

2. Participant ID. Its value is a universally unique ID created as per the Global Unique Identifier specification (https://en.wikipedia.org/wiki/Universally_unique_identifier). Using this type of identifier removes the potential problems with the duplicate identifiers, not only within your single batch but also across all the batches of all the accounts in our system. In addition, the vast number of possible distinct values for this identifier removes the

- possibility of someone attempting to randomly fake Participant ID in the link (URL) that you are going to be sending to your participants.
- 3. Screening URL. This is the link that should be used to start the screening. Depending on the method you chose to use for a given batch (automatic or semi-automatic, see section **4 Batches** in this manual), you can use this link to:
 - a. For the automatic method: your website will divert the participant to this link at some point in your experiment (URL). After the screening is completed, our website will return the participant to the "Call back URL" you specified on the Batch webpage when you created/edited the batch. Note that you should download (copy/paste) the list of these URL-s and develop your website so that it can utilize the URL for each of your participants (web-development skills are required for this method). Feel free to contact us through the [Contact us] link if you experience issues with this process or need additional clarifications.
 - b. For the semi-automatic method: you can copy/paste an URL from this list into an email or a chat with your remote participant. The participant can simply click on the URL or copy/paste it into its "address" field in her/his browser to perform the screening. Once completed, our website will display the predefined "Final message" you configured at the time of the batch creation/editing.

Note that once the screening is completed for a given Participant ID, the URL value for that record will change to (completed).

For both of these methods, once the screening is completed for a given Participant ID, and if another attempt is made with the same Participant ID, our system will reject the screening, displaying an appropriate message.

- 4. Result. This column can have one of these four values:
 - a. Empty (no value) means that the screening for this Participant ID has not yet been completed.
 - b. "Dichotic" this means that the auditory context for this Participant ID is dichotic (the stereo channels are perfectly separated, and the participant is wearing headphones).
 - c. "Non-dichotic" this means that either the participant is not wearing headphones, or the headphones have no perfect separation of the stereo channels (they are mixing the channels' sounds).
 - d. "Disqualified" means that the participant responses caused the record to be disqualified either in phase 1 or at the final stage (if you need additional details, please read the published paper and the related Supplemental material: https://figshare.com/s/e9818607ded7dcad2ff4).

Note that our database keeps all the original responses and the interim results for each screening record. If you need them all, we can send them to you at your request by email – make sure you specify your Account GIUD and Batch GUID in your email request. Note that we are working to provide an option for you to simply download this detailed report by simply clicking on the Participant list webpage, and that option will be available soon.

Important: We are offering this service free of charge, and our resources and capacities are limited. For that reason, we have to keep our database size limited. Therefore, we will be forced to clean up the <u>completed</u> batches after 60 days, counting from the last completed screening of the batch. You will be notified by email three days before our cleanup to ensure you download (copy/paste) the results locally on your computer.

6 Support and security

We offer this service free of charge; we do not have dedicated personnel to support you 24/7. Therefore, we only offer offline service by email. However, if your support case needs a phone call or a chat, we will offer it, yet not as a regularity. Regardless, we are dedicated to supporting your online auditory studies to the best of our abilities and capacity.

We are performing backups of the data daily. Therefore, the data has no personally identifiable information of your participant, except the Participant ID (which is meaningless).

We are hosting our service with one of the best web-hosting providers (GoDaddy). In case our web hosting provider has problems with their platform, your data up to the previous date is safe in our backups – in case of an actual disaster, you may only lose the data of the current day of the disaster. Soon, we will be working on new functionality that will send the data of each completed screening to a secondary (backup) location just a few seconds after the screening. Once this functionality is in place, even in case of a disaster with our provider, your data will be safe on its backup location.

We collect your email (at least one), so we could contact you to announce events regarding our service, such as: planned blackout period due to maintenance, announcement of new versions and improvements, etc. We will not be using your email for any other purpose other than communicating closely related to the service you are registering for.

Any changes in the system that may impact your experiment ("breaking changes") will be announced with sufficient leading time so you could adjust your experiment and systems. In general, our intention is to keep the <u>interfacing contract</u> (the URL signature and the call back signature) static for as long is possible.

7 Final important disclaimers

By using our service, you agree that the administrators of this website are not liable for any perceived or true damages caused by the use of our service.

You are responsible to obtain a consent form from the participants of your experiment that uses our service, additionally informing them about the privacy and cookies policies of your experiment that uses our service. We are not communicating with your participants in any manner.

It is your responibility to thoroughly test our service before using it in your experiments. We do not offer any warranties.

You will provide your institution name, your name and your email address as a registration detail of your account. We will not be sharing your information with any third party, except where required by the law.

We are not collecting any personally indetifiable and other demographic information from your participants.

These terms and conditions are governed by the laws of Canada and the laws of the province of Quebec.