# Using a program based on the "information whispering" children's game to enhance originality in individual idea generation

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#### Introduction

This fictional digital creativity support tool is a HCI program, its purpose being to help the idea generation, namely with broader spectrum, and still connected, but more novel ideas. Imagine the well-known children's game, where a group is present, and starting from the first person, every person has to tell the next one the sentence the other whispered into their ears. This game usually turns into laughter in the end when the last kid has to say out loud what they understood – it usually only slightly sounds or means the same. Probably this last nonsense part would not be useful in idea generation either, but if we took out kids just after the first couple of steps of whispering, there would still be useful, but already altered enough to be novel ideas. With taking out the physical group of the situation and modeling their ideas it could give the kind and amount of a whole group's ideas into the hand of an individual, without having to be in a group. The modeling itself in this case should not be that difficult technically, given that based on the whispering, the children usually say either something that has the same intonation or sounds alike, or has the same meaning.

Based on this, the tool would focus mainly on supporting "little c" creativity, and those with a steep associative hierarchy (Mednick, 1962). Because the fictional tool is based on human semantic association, it models on the one hand the closely related semantic associations, such as sounding the same, but more importantly the further related, or not even related semantic associations as well, modeling the thinking of a playing human mind. Therefore, the tool's focus is more on originality, and not on appropriateness, that aspect should be considered and decided by the users themselves. The need for the tool lies behind the situation of more and more people working individually, this tool could help them with smaller creative tasks to get into this game situation without a group of people present (and without the colleagues' possibly too much down to earthiness). Although the tool could be used for generating more than a couple of ideas, because it is based on the children's game, ideally the magnitude of the ideas for which it could be used are no more than a couple, maximum seven—after that both in the physical game and in the software, the associations become too distant, and may even hold back the user's own ideas. That amount is in favor of the little c creativity, probably in other cases such as "Big C" creativity, it would not work effectively.

### Description Based on Literature

As Benedek and Neubauer (2013) state, a major characteristic of creativity is high fluency. Therefore, people considered less creative, at least by themselves could easily outrun their problems with at least high fluency, namely generating more somehow related ideas at once, and the revise them, or pick the one that they consider best. Benedek and Neubauer (2013) also found that the uncommonness (or originality) increases over time in the case of people with flat associative hierarchies. That would mean that even for them the tool could be useful, if used immediately in the beginning of idea generation — to get to uncommon ideas in a shorter period of time. Although for those with more trouble (if even) generating original ideas, namely those with steep associative hierarchies, the tool could be used right after they start to run out of associations, relatively later than in case of those with flat associative hierarchy. That peculiarity of the use of the tool is to only be considered in case of not taking Benedek and Neubauer's (2013) findings of Mednick (1962) about if there is a difference between these

hierarchies. In this essay, due to the differences in method, we did not wish to decide whether the above mentioned two are right and will continue to consider the difference stated by Mednick (1962).

As Abdulla Alabbasi et al. (2020) cite Runco and Jaeger (2012), originality is a vital part of the standard creativity definition, which allows us to concentrate mainly on enhancing the, or compensating the lack of originality with this tool.

Sawyer (2011) mentions the so-called "free-rider" problem, that means that in basically out of every six people in a group, one tries to lay low and "hop on" the ideas of others while not making an effort. This tool could also tackle this problem. Imagine a leading a small department, where a couple of small "little c" creative tasks need to be done. Knowing about the free-rider problem, and also knowing about the tool would encourage the leader to split up group(s) into individuals and make them work with the tool. This way, instead of probably most of the tasks done by the same group of people while free-riders stay effortless, broader amount of solutions could come in while also facilitating that all employees work. And probably the more is done, the more original ideas are generated, which is crucial when talking about even "little c" creative tasks.

As previously stated, this tool would help the phase of Idea Generation phase of Mumford et al.'s (1991) Creative process model, while the Idea Evaluation, namely the consideration of whether the ideas as worth picking or working with, are the tasks of the users themselves. With that we can make sure again that on the one hand the user makes the effort, let them be in any "little c" situation, and that in the end the tool supports them instead of one-in-one replace them.

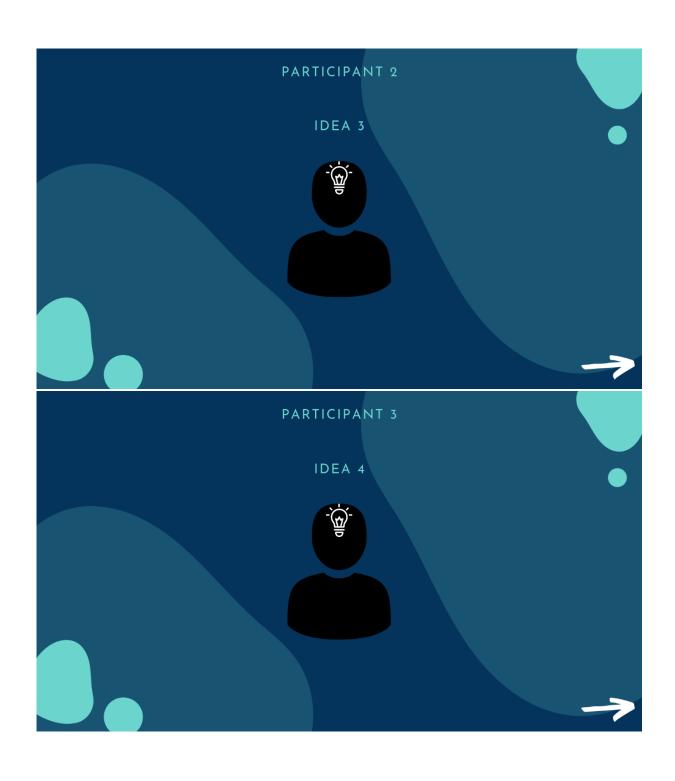
# Visual Description

Visually the support tool would be an online program, a website per se, although with limited efficacy could also be used offline as a downloadable demo. The interface itself would be quite simple, although designed by the latest trends in order to attract users. The user could type in keywords as well as whole sentences, with the best results coming in the golden middle way, where the algorithm has enough guidance to work efficiently, but not whole paragraphs which would make it out of focus. The overall simple interface's purpose is to make the user focus on the task, e.g. advertisements, nudges and banners would not be shown in the app, only when the task is done, and even then, in a discreet manner, in order not to drive away users. With the ideal amount of keywords, heads without a face would pop up after each other, one or two ideas around each of their heads. The user could stop the process without getting to know all of them, but could also click through seven-eight of them, where a final gate would be, on which if the user clicks through, more distant and not a bit relevant ideas could still pop up, but with a warning that this is not the ideal way of working with the tool. The possibility to stop when they feel like they found the right idea limits distraction such as a head with an association in closer position on the semantic map than the previous one (ergo a more common one, therefore a less original one).

Before the final gate, but after the user has clicked through all the individual heads, all of them would be seen on the screen one more time, where they could decide (evaluate) the ideas, or stop and think of more themselves. (See in Figure 1.)

# FICTIONAL CREATIVITY SUPPORT TOOL





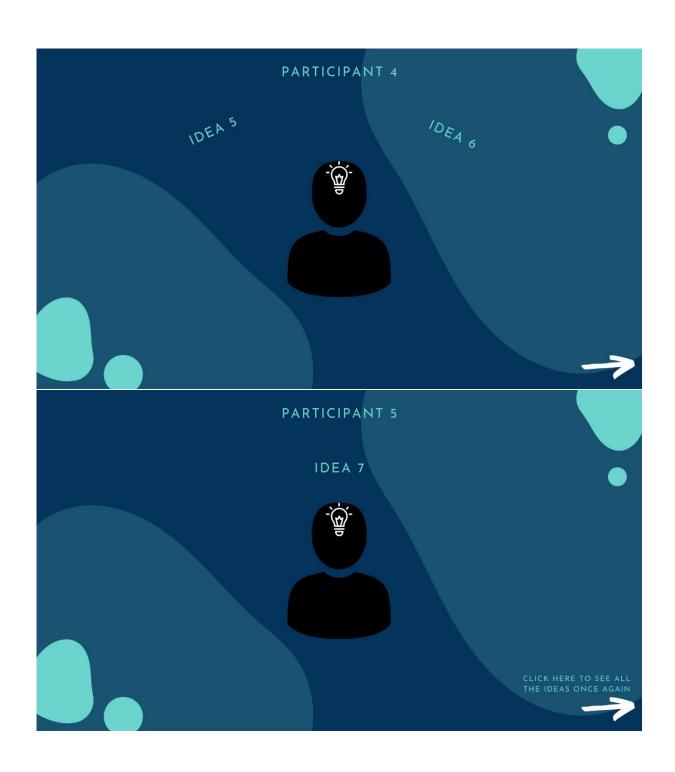




Figure 1: Fictional Support Tool

The tool should be able to be set either with always the same kind of "people"/heads, meaning as if the individual would always play the game with the same group of people, or to slightly change the group and therefore the way of associating every time, i.e. to let the algorithm change.

## **Conclusion and Discussion**

As it has been stated in the introduction, the tool should and would focus on "little c" creativity, and that focus is both a strength and a weakness. It is a strength because with a narrowed down clear focus it would be easier to actually develop the tool to work effectively. On the other hand, a narrow focus also means a narrow market, which could be an obstacle in the process of monetizing the product.

Another key strength is that it models different people's thinking, therefore the program itself can function as a broader tool than just an easy-to-get-to-know, one-way-"thinking" program. To be able to personalize the tool in order to either get the same kind of associations every time or slightly different could also be useful, because it would give the user a kind of freedom in personalizing the tool based on their perceived standing on Mednick's (1962) the steep-flat associative hierarchy.

To sum up, the purpose of this fictional creativity support tool would be to enhance originality based on the well-known children's game. To use such a program in individual idea generation is a way to outrun the peculiarities of group creative thinking (such as brainstorming) while still not letting the individual alone, and giving a tool in their hand that they can use to offer original ideas, programmed to be thinking like those playing the whispering game. While the idea evaluation, and other Mumford et al. (1991) phases/steps stay in the individual's hand, with this tool they now can model the unlikeliness of the whispering game and compensate and/or complete their creativity with a couple of associations.

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