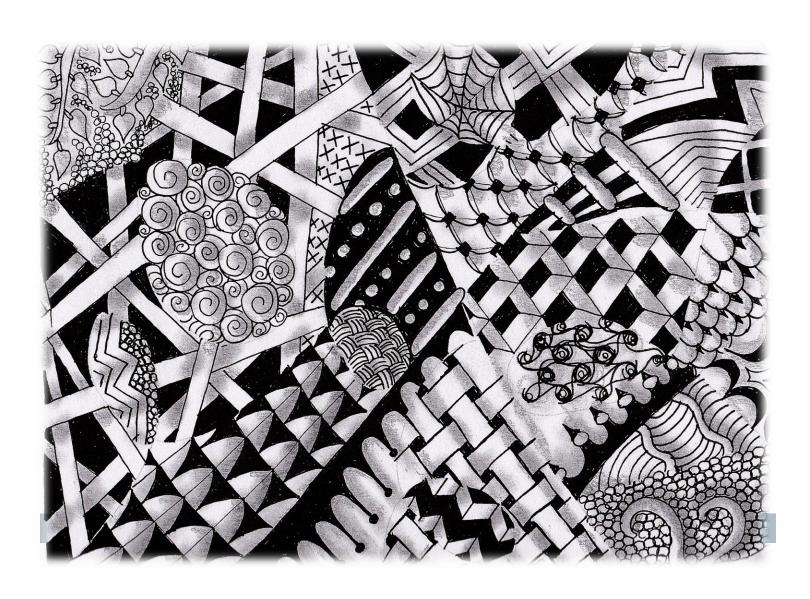


PEAC Zentangle Research Assignment

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Our Research Inquiry

Does your age or gender affect how Zen you become while Zentangling?

This is the question that has been puzzling both of our minds since we have discovered the art of Zentangling. Does it actually have any effect on our minds? Maybe your genetic DNA has something to do with how calm your mind can become. Perhaps Zentangling has no affect whatsoever on your mindfulness, or maybe even increase your stress levels. These are all possible, but we both believe that Zentangling both improves your calmness and also improves your memory and focus. Multiple scientific research articles have shown that Zentangling does have some effect on the mind, and through our research we are hoping to prove that correct, as well as answering our original question.

So what exactly is Zentangling?

Zentangling is a form of drawing, supposed to be healthy for your mind, making you more calm. some research even suggests that it also improves your memory, focus and reduces physical pain. articles say that it is 'inituitive, fun and relaxing with unexpected results'

There are some official Zentangle patterns, that are used in creating ZIA (Zentangle Inspired Art), the finished product of Zentangling. they are all small and quite detailed. Several are used in each zentangle.

Some official expert zentangles are shown on the front page of thi research paper. Feel free to tr drawing any patterns you see in thi research article

Our Hypothesis

Odette's Prediction: I predict that gender will have no effect whatsoever on the subject's Zen. I believe that it depends on the participant's personality.

Liliana's Prediction: I predict that the younger female subjects (Lower and Lower middle category females) will be more mindful than younger male subjects (Lower and Lower middle males) as they mature quicker.

Our Prediction: We predict that our older subjects will be more Zen than younger subjects, as younger subjects cannot concentrate on one thing for very long, and they are much more energetic.

Materials

1. MAAS (Mindful Attention Awareness Scale) Test

Ruth Baer in the University of Kentucky created this test. It has been used in many different scientific research articles on Zen and is proved to be an effective way to measure mindfulness. During the test, you rate how frequently (one being most frequently and six being least frequently) each question applies to you, and you only.

2. Paper

We decided to use the official white Zentangle paper as it has a calming texture and the pen does not go through to the bottom of it. We gave our subjects Zentangle Apprentice tiles to Zentangle on for the 5 day period. Many Zentangle artists use it, and I believe this paper is the most comfortable type for Zentangling.

3. Pens

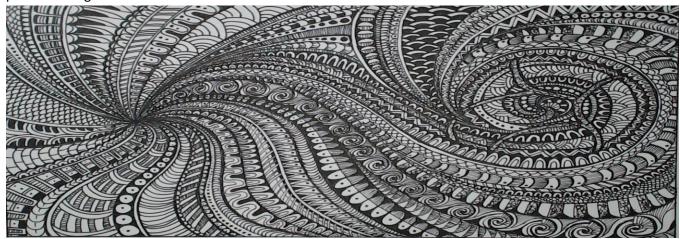
The subjects were each given a Shachihata Artline 200 (with a 0.4 tip) to use for Zentangling. It is important to use good quality drawing pens. They also used this pen for filling out the MAAS test, although some filled it out with a pencil.

4. Pencil

We used a standard lead pencil for drawing strings, borders and shading on the Zentangles, as well as filling out the MAAS test.

5. Tortillian

We used a standard Tortillian to create effect on the shadings on the Zentangles. The Tortillian smudges the pencil shadings.



Our Subjects:

Veronique Leclezio

Veronique is a seven year old female. She is a sister to Odette, daughter to Raymond Leclezio and a granddaughter to Edward Buttfield, who are both subjects.

Chester Rudas

Chester is a six year old male. He is a friend to Liliana and a brother to Sidney Rudas who, again is a subject shown below.

Phoebe Mills

Phoebe is an eleven year old female. She is a friend to Odette and Liliana.

Sidney Rudas

Sidney is a ten year old male. He is a friend to Liliana and a brother to Chester Rudas.

Lucy Pezzali

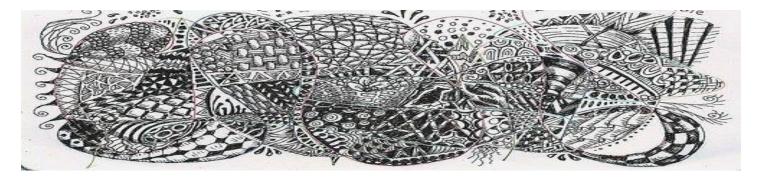
Lucy is a forty two year old female. She is mother to Liliana and is friend to Raymond Leclezio who is shown below. She is daughter to Adele Rogers and mother to Liliana

Raymond Leclezio

Raymond is father to Odette and friend to Lucy Pezzali. He is also father to Veronique Leclezio.

Adele Rogers

Adele is a female, grandmother to Liliana and mother to Lucy Pezzali.



Our Method:

After we decided on our subjects and double checked that they could participate in our research, we met up with them (all of them being friends or family) one by one, although sometimes we did joint lessons. Beforehand, we created a script together to make sure that no one got special treatment. The script is shown below.

Firstly, after they had sat down, we would take them through the MAAS test and explain to them what we would be researching. If anybody needed the questions explained to the in simpler terms (mainly younger subjects) we would help them. We related most of the questions to schoolwork and the average chores you do at home. After collecting the tests we would explain to them what the art of Zentangling is and that according to research it is supposed to make you feel more mindful.

We then showed them some Zentangles we had completed in the past, and examples of what they would be creating today. Each participant had a Zentangle tile in front of him or her. We taught them how to draw the border and the string for their Zentangle, starting off with just the simple V shaped string with a line through the middle. We told them to experiment with different strings later on.

We then taught them four very simple but effective tangles to place in their first creation - Crescent Moon, Tipple, Msst and Holibaugh. We believe that these are some of the most simple but effective patterns. We took them through the steps of drawing the patterns, and invited them to ask questions about how to do them. After the patterns, we did some shading with them, using the Tortillian and some ordinary led pencils. We waited for them to finish their Zentangles, before asking them to sign and date their work.

We collected their drawings and handed them each five 'Zentangle Apprentice' tiles. The Participants then took the five tiles home. We asked them to try and complete one Zentangle per day. If they didn't have enough spare time, they could do, for example, half a Zentangle one day and the second half the next day. We asked them to return any spare tiles to us.

We gave them a second MAAS test to do after the five-day period of Zentangling. They each returned their Zentangles along with the second MAAS test so that we could compare the results of the tests before and after they Zentangled daily.



Our Script:

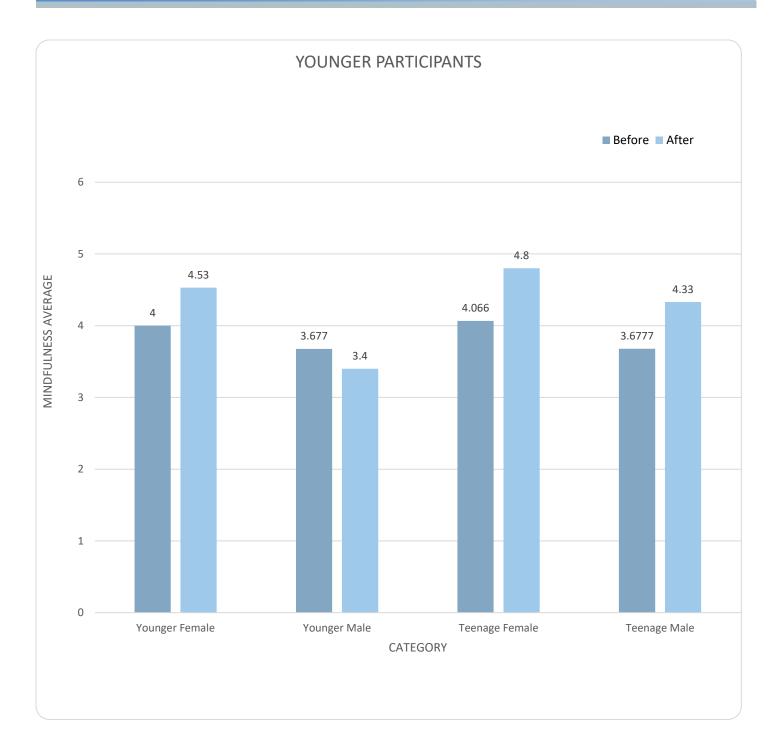
This is the script that we used to teach each person zentangling.

Hello paricipant(s). Today, I, Liliana Pezzali/Odette Leclezio, will be teaching you the art of Zentangling. But before we begin you must do this test. It is called the MAAS test. It is a form of mindfulness test. You are not graded on your academic skills, but you are graded on your Mindfulness. There are no mistakes in Zentangling or this test. When I say start, please turn over your paper and begin. Take as much time as you want and please tell me if you have any queries or concerns. Start!(Wait until they are finished.) Well done. Please hand me your papers and collect a piece of paper, a pen and a pencil.

Welcome to your first official Zentangling lesson. To start with, we will be learning some Zentangle patterns that you can draw. First, grab your pencil and draw a border for your zentangle. It can be any size and shape you want. Make sure it is not too big or not too small. Then draw the string. The string is a line to divide your zentangle into parts. Each part is a different tangle (pattern). For your first zentangle, I recommend a V shape, with a line through the middle. After this though, you can experiment with different strings. The first pattern we will be learning today is the cresent moon. Follow the steps that I tell you. Do this in pen. Remember that there are no mistakes in zentangling and there are no erasers allowed. Place this zentangle in any section of your paper.

Firstly, you draw evenly spaced semicircles all around the edges of your chosen space. Make sure they are approximatly the same size. Then colour them in all black with your pen. Then draw an aura around each semicircle (an aura is like a border) and continue over and over again until two borders touch. Then, do an aura spiral dipping in between the borders until there is no more room. The next pattern we will learning is Msst. Msst is probably the easiest Zentangle there is. Draw wiggly lines coming off one side of your chosen section, all varieing in lengths. Then draw a different number of dots at the end of each line. You are finished with that pattern now. The next tangle is Tipple. Tipple is quite time consuming. All you have to do is draw lots and lots of tiny little circles, tightly pressed together. It takes quite a while to complete. The last pattern you will be learning today is Holibaugh. What you have to do is draw what wooden planks would look like if you dropped a whole lot of them onto the floor. Draw a random pattern of wooden planks, all different widths. Some must go under other ones.

Well done particapant(s) they both look marvellous. Now, before we go I will give you the MAAS test to do again five days from now. Also, we will give you each five zentangle tiles. If you can, we would like you to try and do one each day for five days before you do the test again. Once you have done your second test five days from now, send it and your zentangles back to us. Try and do as much zentangling a day as possible, with a maximum of one completed zentangle tile. Thank you again for coming and participating in the research project. You have been a great help to me.



Younger Participants' emotions/notes

YOUNGER CATEGORY:

Veronique (female)

When I asked her if she was willing to take part in the project, she agreed willingly. At the start of the lesson she was being uncooperative and not taking the lesson seriously. It took a while to get her to settle down but once she did she behaved appropriately. I believe she was calmer by the end of the one hour session. She remembered to Zentangle daily and did it without having to be reminded. I feel that during the zentangling experience, she was feeling pressured to get the drawing absolutely perfect, because when I gave her a tip for her Zentangle, she got annoyed and shouted at me to go away. Overall, I believe that the Zentangling period has helped her become less sensitive and not as easily angered as she was before.

Chester (male)

Chester was reluctant to take part in the test. He was very easily distracted, and needed a lot of help with the MAAS test. After the questionnaire he settled down, and was very focused. I believe he enjoyed the experience as he thanked me afterwards for using him in the experiment. After I taught him he was less hyper and was relaxed.

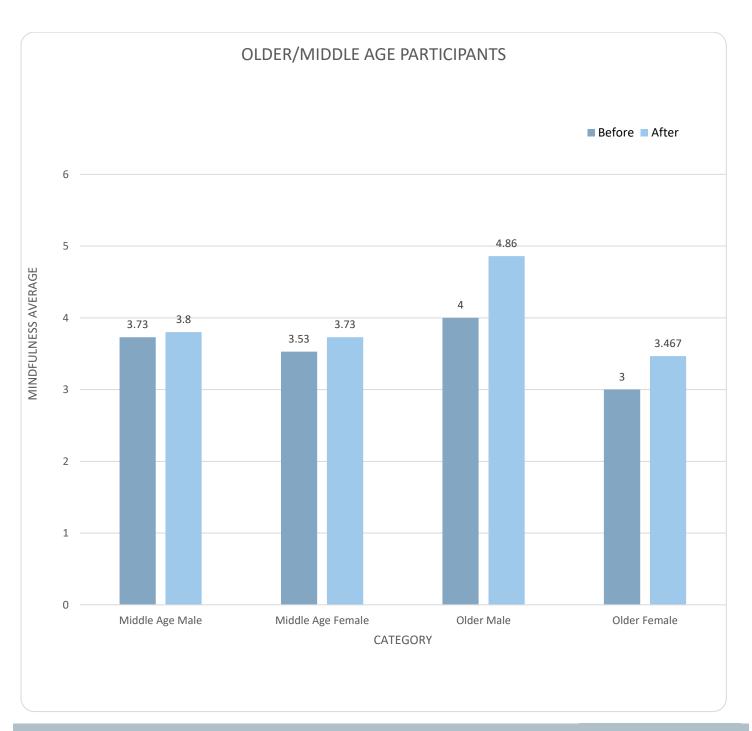
TEENAGE CATEGORY:

Phoebe (female)

She was very willing to take part in the experiment. She seemed to enjoy focusing her mind. She followed the instructions extremely precisely. I thought that she was quite calm and relaxed during the lesson. As well as drawing her Zentangle, she talked to us at the same time. Her Zentangles were definitely not rushed and showed signs of care and attention. She hasn't been finding enough time to Zentangle daily which is frankly disappointing as she does not have much homework at the moment.

Sidney (male)

Sidney was extremely reluctant to participate. He was easily distracted and he was not focusing on his work. Eventually he started relaxing and he was interested. His results showed that Zentangling helps immensely to calm and focus your mind. His drawings were clearly not rushed and I think he put a lot of effort into it. He seemed pleased with his work when we collected it.



Older Participant's emotions/notes

OLDER/MIDDLE AGE CATEGORY:

Raymond (male)

Raymond agreed to take part in the experiment when I asked him, but seemed a little bit wary. I (Odette) did a joint lesson with Raymond and Veronique. At the start of the lesson Raymond was being uncooperative and talking with Veronique. He calmed down after I started the lesson. He took lots of time with all the Zentangles that he completed, and improvised on the patterns and strings, at some points creating his own tangles. He would enjoy looking back over his work and comparing his Zentangles. He was quite pleased with the work that he produced.

Lucy (female)

Lucy was very excited to take part in the experiment. She was extremely focused from the very beginning and she took caution in all of the patterns she drew. I believe she thoroughly enjoyed Zentangling, and was calm during and after the experience. She was, like Raymond, improvising and even creating new tangles. At the end she told me she would happily keep doing Zentangles as they relaxed her. I did a joint lesson with both Lucy and her daughter, Neva, although she was not included in the experiment. She told me she really liked Zentangling at the end as well.

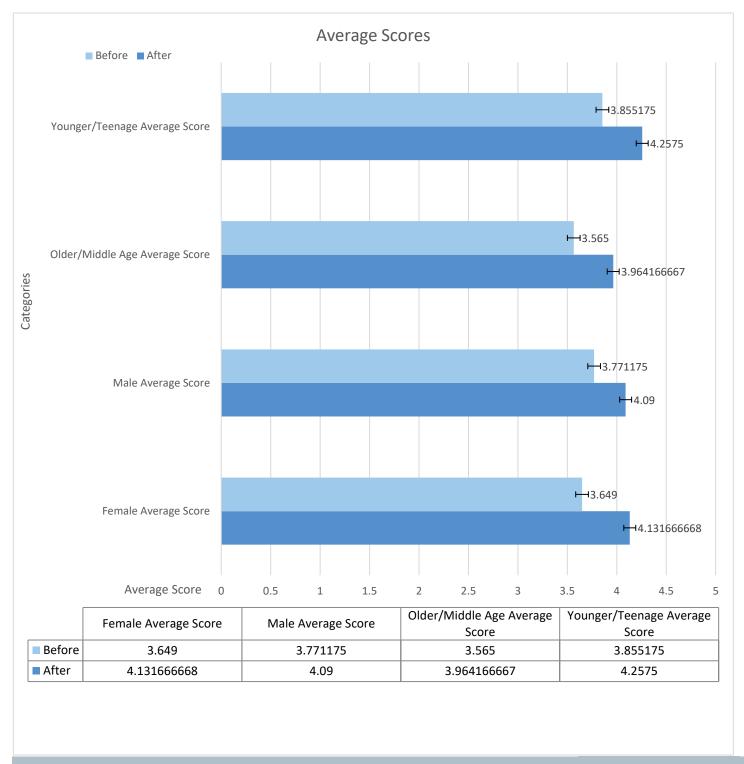
OLDER CATEGORY:

Edward (male)

Edward agreed to take part in the research. His wife, Margaret, offered to help with the project too, so I used both of them, but didn't include Margaret's results in the article, as we already had a volunteer for the upper female category. Margaret helped Edward with the MAAS test. He took care with his Zentangles, and like Raymond, improvised with the patterns and created his own. He told me that he enjoyed the experience.

Adele (female)

Adele was happy that she was included in the experiment. She was very careful with her patterns, although I had to remind her that there are no mistakes in Zentangling as she requested for an eraser multiple times. She was happy with her Zentangles at the end.



Our Results

Graph 1

The first graph shown in this research article was the Younger Participants graph.

The only participant whose score decreased was a six year old male, who was in the Younger Participant category. It was clear that females achieved a higher Zen average than boys in both before and after zentangling. Each participant whose results were shown in that graph scores increased by at least 0.5.

The biggest increase was the teenage female, Phoebe, who increased by 0.734. The biggest decrease was, of course, Chester, who decreased by 0.277. The person with the least difference with their scores was, again, Chester. Between the Teenage Male Category and the Teenage Female Category the scores were not very different. It is clear to see that there is a pattern in gender but not age.

Graph 2

The second graph shown in this research article was the older participants' graph.

There were no participants in this graph whose scores went down. Both middle aged participants' scores only increased by a slight amount. Both scores were quite similar. The score that increased the most was by far our Older Male participant – Edward. The leas increase was our middle aged Male participant – Raymond. There is no apparent patterns in the graph apart from the fact that the scores seem to improve by age.

Graph 3

The third graph showed the average scores of ages and genders.

It is clear to see that every average score is above the number 4 apart from the older/ middle age average score. Every average score improved and none of them decreased. The category with the highest score after Zentangling was the Younger/Teenage Category. Although in the testing before Zentangling the males had a slightly higher Zen average score, one they had Zentangled the females had a slightly higher one.

The scores for genders were extremely close, while the average scores for age categories are further apart. Interestingly, in the third graph it shown that Younger Participants had a higher score than the Older Category, which proves our hypothesis incorrect.

CONCLUSION

In conclusion to our findings all the graphs have shown that our joint hypothesis of older subjects being more Zen than Younger Participants is incorrect. Our graphs have shown that the younger participants have achieved a higher Zen rating both before and after than the Older participants (average). Perhaps the younger children did not put down what they feel, but what they believe or hope they feel — and that affected their score Perhaps Older participants have more past to look back at to regret/worry about, making them less mindful.

There does not seem to be a pattern in the gender averages, except in the younger participants' category. In the end Liliana's prediction that younger Females will be more Zen than Younger Males has proved correct by our research. Odette's prediction that gender will have no effect whatsoever of the Zen score is proved correct on every graph apart from the first one.

Back to our original question – Does age or gender affect how Zen your mind can become?

According to our graphs, only your age has an effect on how Zen your mind can become. It also proves that the experience of Zentangling does have an effect on your mind, as many other research articles suggest. In most cases, Zentangling does improve your mindfulness, but it varies by how much increase.

Only in one case did it decrease. It decreased by quite a bit -0.277. Maybe he had something stressful going on during the time of the experiment. We believe that that our question proved to us that usually your gender has no effect on you. It also shows that younger minds are more able to absorb and focus on a particular subject.

We have affectively answered our question that we have been asking, and are pleased with the results. It was not what we had expected, but it was interesting to find out.



List of References

Virginia Commonwealth University, Department of Psychology 'n. d.' *mindful attention awareness scale- Kirk Warren Brown* [online] 'available from' http://www.kirkwarrenbrown.vcu.edu/wp-content/scales/MAAS%20trait%20research-ready%20+%20intro.pdf

SmartPrimaryEd (2015) IDEA: Zentangle – what is it? Why do it? | SmartPrimaryEd [online] 'available from' https://smartprimaryed.com/2015/03/11/idea-zentangle-what-is-it-why-do-it/ [11/03/2015]

