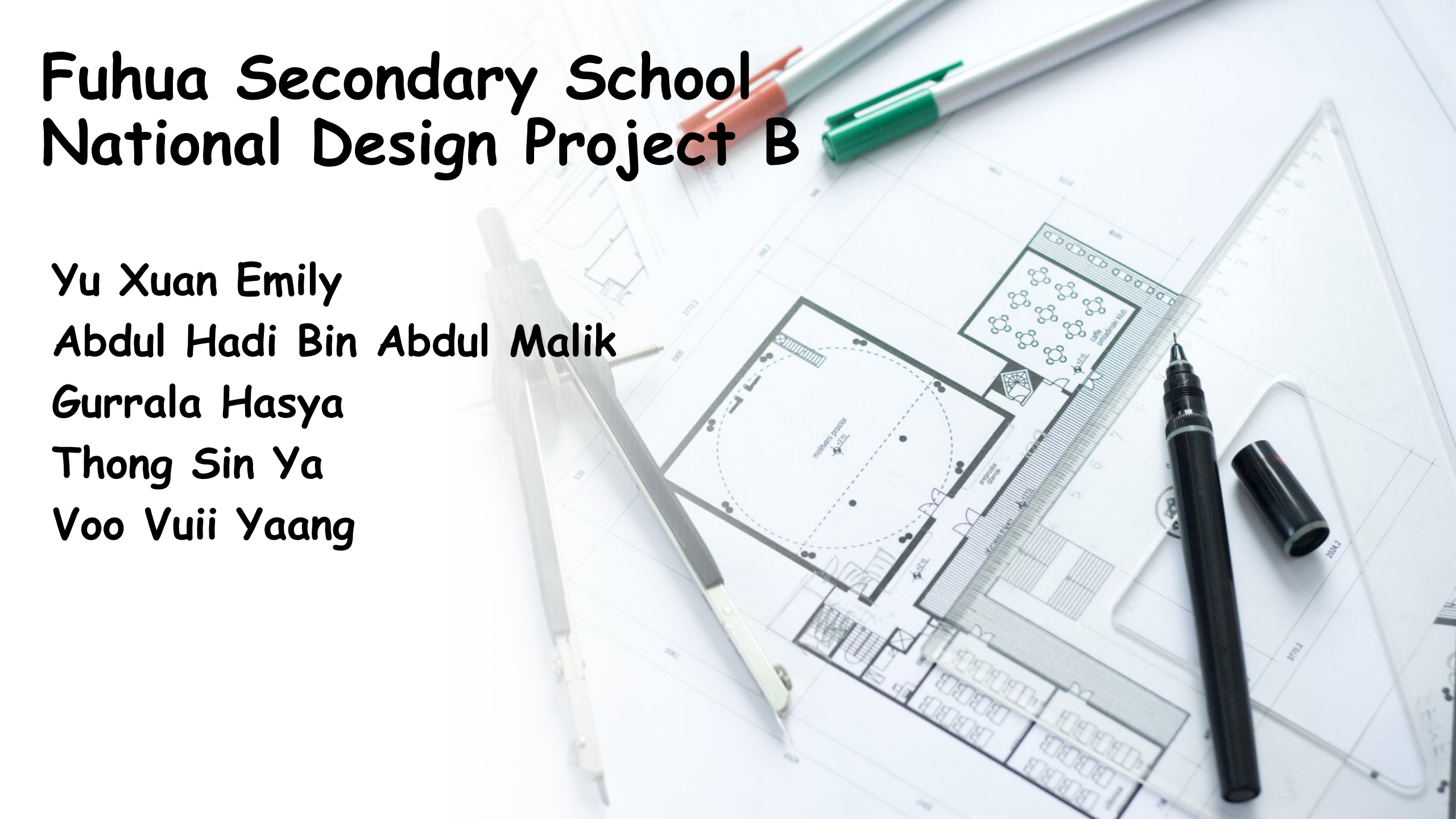


Fuhua Secondary School National Design Project B

The background of the image is a detailed architectural floor plan of a school building. The drawing shows various rooms, corridors, and outdoor areas. Key features include a large circular area labeled 'multimedia auditorium', a rectangular area labeled 'cafeteria', and several smaller rooms. The drawing is overlaid with a grid of numbers. Various drafting tools are scattered around the drawing: a pair of compasses on the left, a ruler on the right, and several markers (orange, green, black) and a black pen. The overall scene is a professional and creative workspace.

Yu Xuan Emily

Abdul Hadi Bin Abdul Malik

Gurrala Hasya

Thong Sin Ya

Voo Vui Yaang

Research on Stress

Stressed in Singapore: Rising cost of living is triggering wellbeing issues

The rising cost of living, e.g. fuel and utility costs, is the number one stressor in the city-state, as cited by half the respondents.

Survey data shows stress levels in Singapore remain significantly higher compared to the global average, with 86% of Singapore respondents saying they are stressed and 15% saying they struggle to cope with stress.

The city-state's top stressors are:

- the rising cost of living (50%), eg fuel and utility costs,
- uncertainty about the future (38%)
- personal finance (35%), and
- family finance (22%).

These results are from Cigna Singapore's report, titled [*Stressed in Singapore – Employer Opportunity*](#), which surveyed 1,001 people in Singapore, to track wellbeing in five dimensions: work, family, social, physical, and financial. Worryingly, Singapore is worse off across all dimensions, compared to APAC and global averages. Among the five dimensions, the score on financial wellbeing is the lowest in the nation, with only one in 5 (20%) confident about their current financial situation or ability to finance their own/family's medical needs. Among all groups in Singapore, women, singles and those not working have the poorest financial wellbeing.

On the other hand, responses indicate that wellbeing at work has become better off, with the nation scoring 66.2 on the index, +1.6 points from the 2021 survey, but still behind APAC and global average by -3.3 points.

Raymond Ng, CEO and Country Manager, Cigna Singapore commented on the results: "Singapore remains one of the most expensive cities to live in both regionally and globally. Recent economic trends have only exacerbated stress levels among adults, especially the younger generation."

Delving deeper into the demographics, in Singapore, Gen Z (aged 18 to 24) are the most stressed (95%). They are also the most emotionally impacted by stress, with 51% saying they became more emotional, and 50% feeling depressed. Knowing that stress manifests physically, telltale symptoms such as loss of concentration (56%) and productivity (48%) were the most evident among Gen Z.

Further, Gen Zs are the most likely to experience symptoms of burnout compared to other age groups, especially procrastination (44% vs. 23%) and experiencing self-doubt (37% vs. 22%).

Comments

86% of the people surveyed in Singapore says that they are stressed.

There is a design need to help people destress.

Singapore spends \$3.1 billion on stress-related illnesses annually: Study

SINGAPORE - A study has found that Singapore spends about US\$2.3 billion (S\$3.1 billion), or 18 per cent, of its total healthcare expenditure on stress-related illnesses annually.

This put the nation's proportion of expenditure on stress-related illnesses second-highest out of the nine regions studied in the report, coming just 0.8 per cent behind Australia's 18.8 per cent.

The other seven regions were Hong Kong, South Korea, Taiwan, Thailand, United Arab Emirates, the United Kingdom and the United States.

The report, which was produced by healthcare consultancy firm Asia Care Group on behalf of health insurance and services company Cigna, was published on Thursday (Nov 21).

Globally, 84 per cent of people surveyed in past studies admitted to feeling stressed, said Cigna's regional chief executive officer Julian Mengual, while 64 per cent reported that they operated in an "always on" environment.

This refers to people feeling the need to engage with work both during and outside office hours, a culture which Mr Mengual said contributes to stress levels worldwide.

[The problem is more prevalent in Asia](#), where 91 per cent of respondents reported feeling stressed and 80 per cent saying they had an "always on" work culture.

These earlier research findings led the company to pursue further research in the area in order to raise awareness about stress as a healthcare problem, he said.

"Stress is a big issue... (but) sometimes this is a topic that people don't like to talk about, and we really need to address it to move things forward," said Mr Mengual, who also noted that stress is linked to diseases such as hypertension and diabetes.

Cigna's latest study analysed healthcare utilisation rates and related costs of stress-related conditions using public and private data on inpatient and outpatient admissions, and visits to general practitioners (GP) and the emergency department in each region.

Stress-related conditions can refer to physical and mental symptoms that are caused by stress. Some physical symptoms are headaches, muscle aches, joint pain, irritable bowel syndrome, heartburn and trouble breathing, while the mental symptoms include anxiety, depressive and panic disorders.

In Singapore's case, data from the Ministry of Health and private hospitals was used to make the calculations.

Among other things, it was found that over 160,000 people here are admitted to public hospitals as inpatients for stress-related illnesses every year, at an annual cost of around US\$931 million.

More than 11 million appointments are made with GPs here annually as a result of such illnesses, costing about US\$1.1 billion.

Over two million GP appointments each year were for chest pain driven by stress-related mental illness, and about 240,000 people were sent to the Accident and Emergency departments of hospitals for stress-related illnesses yearly.

Asia Care Group's managing partner Thalia Georgiou said: "In a country of just over five million people, that's a very sizeable number."

Aside from calculating the costs of stress-related illness, the report also presented recommendations for governments, employers, healthcare providers and public and private healthcare insurers to deal with the problem.

Comments

On a wider view, stress affects the Singapore economy and healthcare too. If the stress level can be reduced, it will benefit the nation.

Your desk toys are making you smarter

Don't stop fidgeting.

An emerging body of research suggests that keeping your hands busy—with, say, a slinky or a stress ball—can improve cognitive performance and reduce stress, Sue Shellenbarger writes for the *Wall Street Journal*.

Brain-body connection

Scientists are studying the ways physical movement and your environment can influence your cognitive functioning in a new field called "embodied cognition."

[WSJ: Finding mental wellness in the workplace](#)

Frank Wilson, a neurologist and author of a book on the subject, says engaging with the physical world can be a powerful way to boost brain power. "The hand can operate as a director of consciousness—a tool or agent for the mind in achieving a mental state in which people will be able to get the outcome they want," he says.

For instance, in a series of studies published last year in *Psychological Science*, researchers from **Princeton University** and the **University of California-Los Angeles** examined how note-taking styles influenced cognition. According to the studies, students who took lecture notes by hand—rather than on a computer—retained more information and provided better answers to abstract questions. Another recent study in *Psychological Science* found that children who often play with blocks have improved scores on tests of spatial reasoning.

[In the workplace, being a perfectionist isn't a good thing](#)

Psychologists are now taking their studies outside the classroom to see how common workplace distractions—such as desk toys—can improve mental performance.

How do you fidget?

Researchers at **New York University's (NYU) Polytechnic School of Engineering** are in the middle of an ongoing study into how 40 workers use desktop distractions, such as slinkys, pens, and stress balls, to give themselves a mental boost.

As part of the study, researchers invited workers to post images and videos of their desktop distractions—along with a description of how fidgeting makes them feel—to social media.

The goal is to get a sense for what types of movements provide what types of benefits, so researchers can design objects to meet specific needs.

[HBR: Difficult task at hand? Step one is to tidy your desk.](#)

Katherine Isbister, research director of NYU's Game Innovation Lab and leader of the study, says it makes sense that tactile play can provide a mental release.

"Being able to squish something really hard or knock it on the table" is a way to overcome negative emotions such as stress or boredom, she says.

Chrystanyaa Brown, a manager at the lab, agrees. She has her own desk toy: a rubber penguin. "When you squeeze him, his googly eyes pop out," she says, adding "It makes whatever you're doing a little bit better" (Shellenbarger, [Wall Street Journal](#), 3/2).

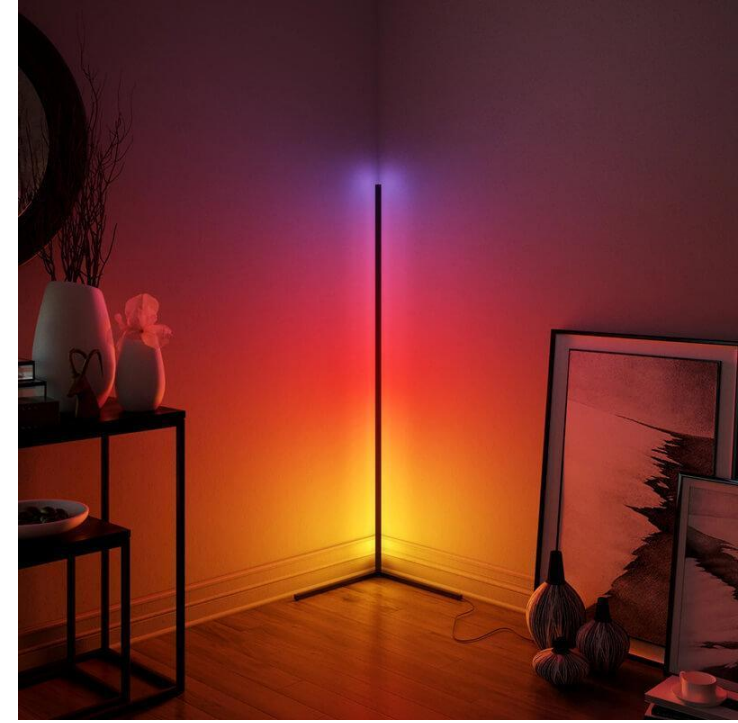
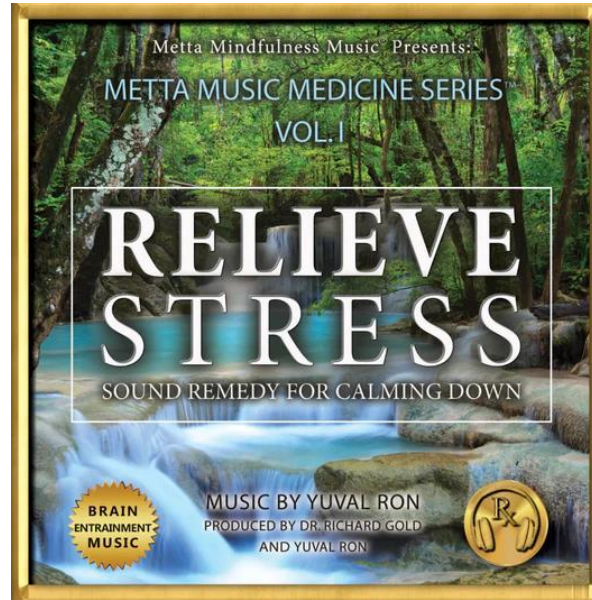
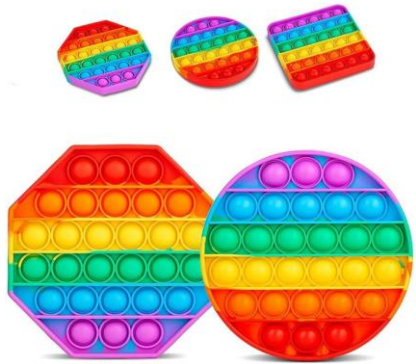
The takeaway: New research suggests fidgeting—even if it is only twirling a pen—has cognitive benefits, such as increased focus and reduced stress.



Design Brief

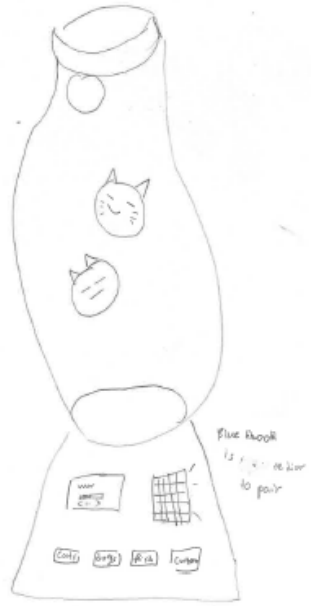
Design and make a product to help young adults destress.

Existing Product for Stress



Ideation

Hasya
3s6



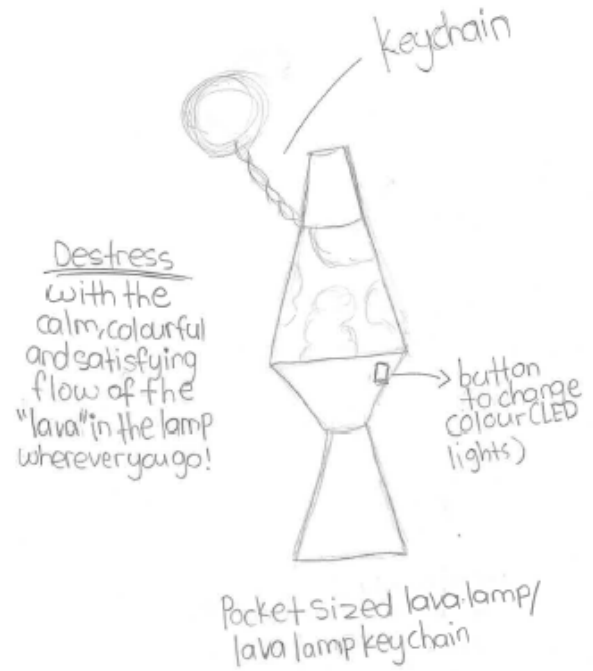
Blue knob is a color to pair



heavy bottom



Small ball
can put in pencil case or bag.



Destress
with the calm, colourful and satisfying flow of the "lava" in the lamp wherever you go!

keychain

button to change colour (LED lights)

Pocket sized lava lamp / lava lamp keychain



Ideation

Emily Va Idea 1



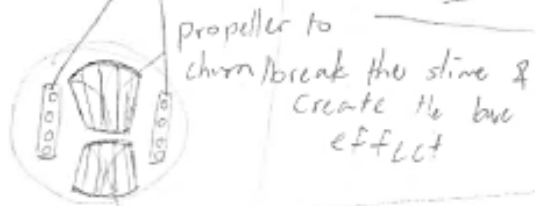
Level for propeller

switch for LED colours

Borax container, removable for cleaning

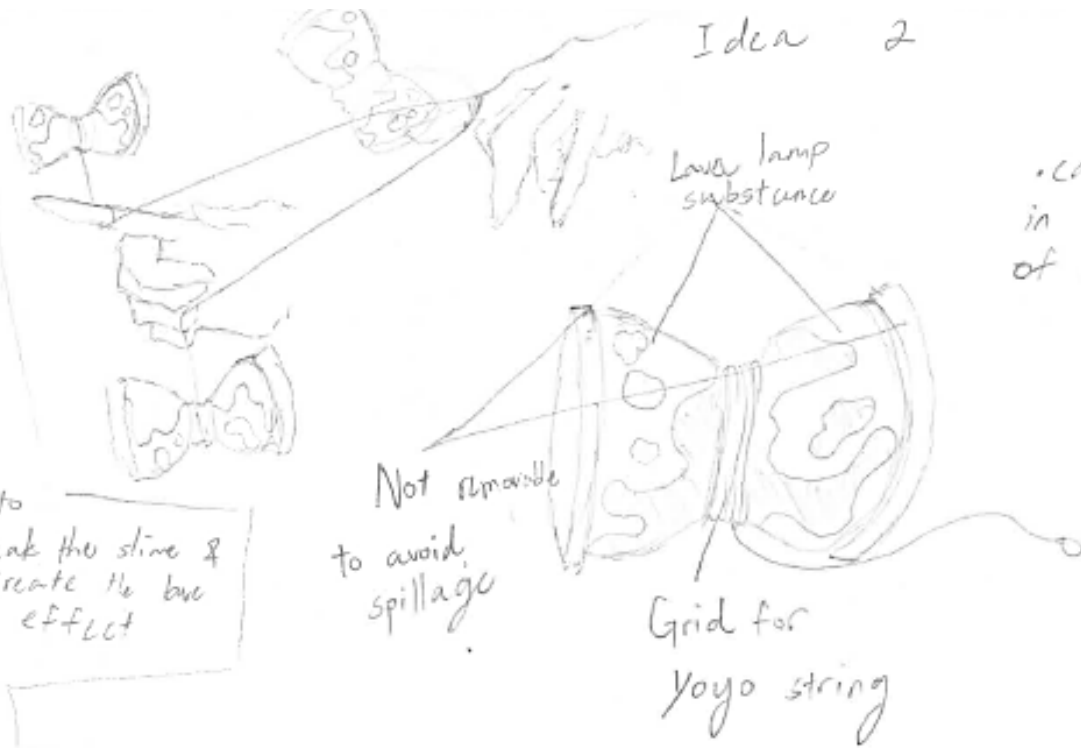
Button to suck up / release borax

LED strips
Bottom of the lamp



Filter grid to separate the slime from the sucked up borax

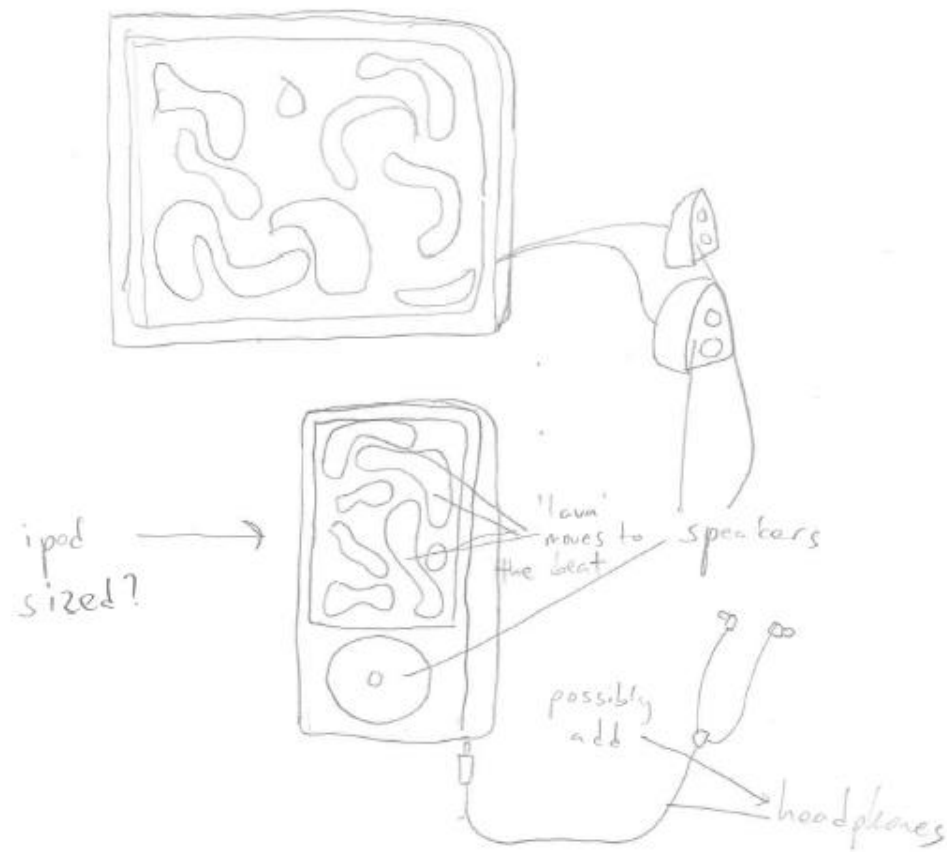
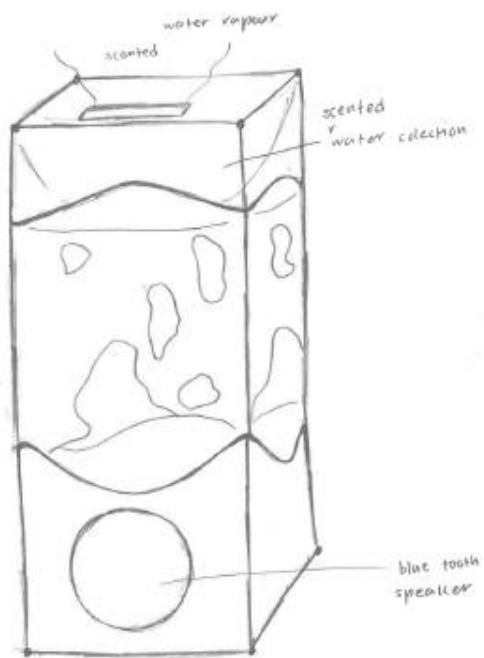
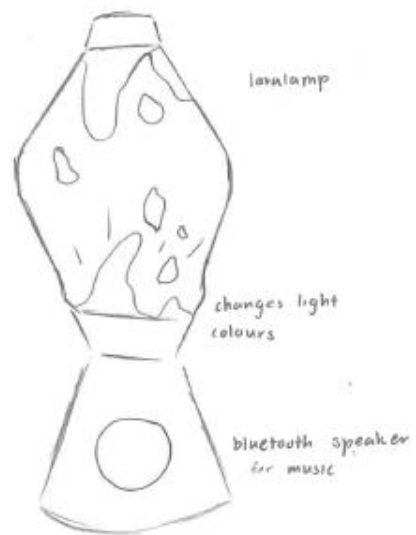
Idea 2



• CAN come in a variety of colours

Ideation

Sim Ya



Selected Idea



- Yoyo Lava Lamp

Works like a fidget spinner. It is fun, the bright colours from the lava lamp brightens up the environment.

User can play and destress with this product.

New research suggests fidgeting—even if it is only twirling a pen—has cognitive benefits, such as increased focus and reduced stress.