



SNUGGLI →
HUGGING
↓
PILLOW
DESIGN FOR
WELL-BEING
SPRING 2021 →

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Research

Nowadays, a rising number of young adults are experiencing sleep related problems and mental wellness issues which cause many negative effects in their daily life. According to research data, stress and sleeping problems share a “reciprocal relationship” in which “one of these issues can lead to improvements for the other” (Foley, 2020). An abundance of survey indicates that young adults are experiencing increased levels of stress and depression as “74% of people said they had been overwhelmed by stress” within the last year (Admin, 2020).

According to the author of iGen and psychology professor at San Diego State University, teens and young adults

experienced a significant rise in “serious psychological distress, major depression, and suicide” between 2005 and 2017 (Divecha, 2020). In addition, American College Health Association surveyed “more than 26,000 college students” which shows that “approximately 40-60% reported significant episodes of anxiety or depression in 2018” (Divecha, 2020). Indeed, mental wellness is causally linked to one’s sleeping quality. Having an adequate amount of sleep is essential for healthy mind and body functions (Divecha, 2020). Major symptoms from sleep deprivation include slow thinking, mood changes, lack of energy, and some other mental and physical health problems (Sun, 2020).

Products on the market related to stress relief including aromatherapy diffusers, fidget spinners, hugging pillows, coloring books, massaging devices, and weighted blankets (Villines, 2020). SCIONE fidget spinner is “a regular shaped fidget spinner with stainless steel ball bearings” (Medical News Today). Solutions in helping young adults sleep better, comprising similar products to stress relief, are white noise machines, weighted blankets, meditation apps, as well as various sleep-friendly supplements (Renton, 2020). These products encourage users to practice more on self-care and improve their mental health. The alternative solution in combining the functionality of alleviating stress and improving sleeping quality is in demand.



Problems of young adults with insomnia and loneliness have been confirmed and further explored during interviews. The interviewees are encouraged to lead the conversation as they talk about their daily life, current struggles, and any conflicts they are facing. Hedy, one of the interviewees, is about to graduate from college and is currently living by herself. She states that living alone is nice but “there are also times when I feel really lonely being in my apartment” (M. Tuo, personal communication, February 3, 2021). She sometimes gets “very anxious” during the current pandemic period.

Another interviewee, Vicky, mentions that she might be having “a sleeping problem” and she is used to “going to bed late in recent years” (M. Tuo, personal communication, February 3, 2021). She is considering “do some meditation before going to bed.” Shuo has been working as an editor in an international magazine company after she graduated from college four years ago. Shuo believes that “a better product could be designed to help adults to get away from feeling stress” (M. Tuo, personal communication, February 3, 2021). She claims that there is a lack of awareness about the need for products to relieve stress among young adults. Each interview took about 30 to 60 minutes and was recorded on video-tape, which were transcribed later on. Several conversations with people from generation Y and Z have proven many of them are experiencing sleep problems as well as feeling alone or anxious.

Interviews

"I'm worried about the new threat to face-to-face conversation if people are used to wearing masks from now on. I feel lonely very often especially during this time of the year when everyone wears a mask while talking."

"I have lived in Shanghai for almost 6 months and sometimes it is nice to live alone but there are also times when I feel really lonely being in my apartment."

"I'm used to go to bed late in recent years and I think it is a really bad habit. However, it is hard for me to fall asleep sometimes. I'm not sure if I have a sleeping problem or I should do some meditation before going to bed."

"It's really hard to find a desired job in this difficult time that can satisfy my pursuit for personal development. I have been feeling really stress lately."

"Sometimes I feel anxious if I don't have my phone with me."

"Sometimes I just don't feel like doing anything. I have difficulty sleeping because of my anxiety. I also think that I couldn't find the best way to start when facing a heavy work load."

Precedents

Various hugging pillows are sold on the market with similar form and function. Some of these precedents have limited functionality which is only to be used in a single sleeping position. Other precedents show conventional appearance in an "I" or "U" shape. Moonlight Slumber's Comfort-U Body Pillow is a semi-circle hugging pillow designed mainly for pregnant women and the elderly who seek for better sleeping experience throughout the night. The product comes with only one color which is plain white. Made of synthetic down, the pillow is odorless and easy to wash without clumping after repeated washing. A similar product to Comfort-U Body Pillow, Leachco's Back N' Belly Chic provides equal support for both back and belly, which allows the user to turn from side to side overnight. The inner contour mimics the shape of an hourglass, which caresses the natural curve of the user's body.



Moonlight Slumber Comfort-U Body Pillow



Leachco Back N' Belly Chic Pillow



Boyfriend Pillow

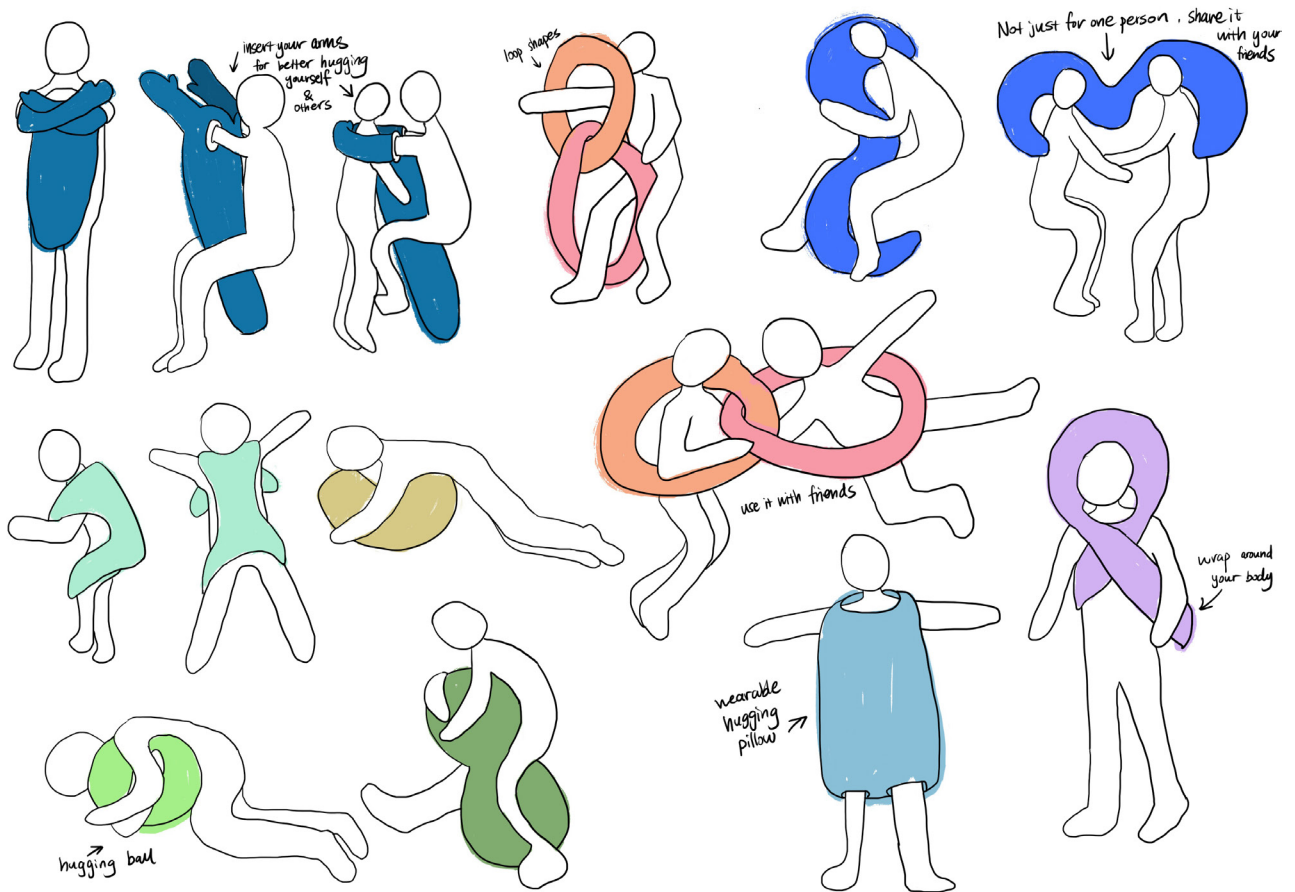
These tube-shaped pillows with less appealing color often reveal a sense of loneliness to the user as it almost reminds and emphasizes them they are lonely at home. Taking Boyfriend Pillow as an example, the product is shaped like a buff man's upper torso whose arm can wrap around the neck of the user during sleep. The length of the pillow is much shorter than any other hugging pillow on the market. However, the shape of Boyfriend Pillow is so obvious that users are nearly sleeping with a fake man's body as a reminder of being single or lonely. The product might provide a sound sleeping experience to users but fail to make them feel less lonely when using the pillow.

Solution & Testing

Since the intended users for this product are young adults who suffer from sleeping problems and mental wellness issues, the final product is not only functional but also visually pleasing while successfully lowering stress and anxiety levels of users. Seeing the rising need in products for stress relief among young adults, Snuggli is designed as a hugging pillow to not only improve sleep quality but also reduce feelings of stress and loneliness experienced by young people.

In order to generate new and unique product forms, various testings are conducted for users to try out existing pillows and give feedback on their favorite sleeping positions as well as other advice on a better performance of the hugging pillow.

After speaking with several young adults who have experienced stress or sleeping problems, they provided their usual sleeping position and specific pressure points that make them feel comfortable. According to the feedback from users, at least fifteen prototypes are made in plasticine for the visualization of the overall form. They are further developed into two particular shapes of hugging pillows, one mimicking the infinity symbol and the other one showing in the shape of the pretzel.



Sketch models

By combining two initial ideas, the user can tuck one end through the hole on the other side of the pillow which motivates the user to play with the product to alleviate stress. However, Prototype 1 takes too much space on the bed. The motive of tucking also creates difficulties when the user tries to tuck their body parts through the hole.

Prototype 2 is a simpler version from the previous design which connects the intersection and forms the pillow into a Q shape. The U-shaped pillow takes a lot of space on the bed and the I-shaped pillow serves a limited function. Prototype 3 thus eliminates their disadvantages by forming a J-shaped pillow filled with organic cotton along with an add-on pillow for stronger support over the neck for users.

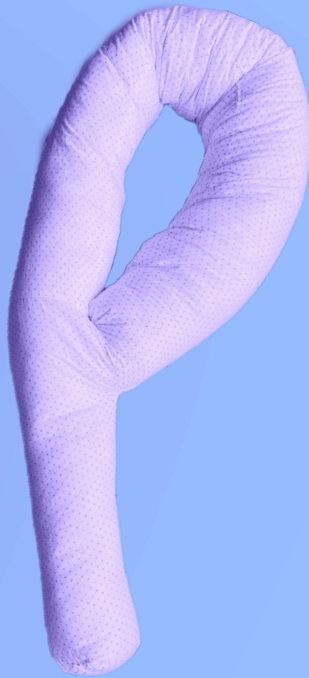


Prototype1

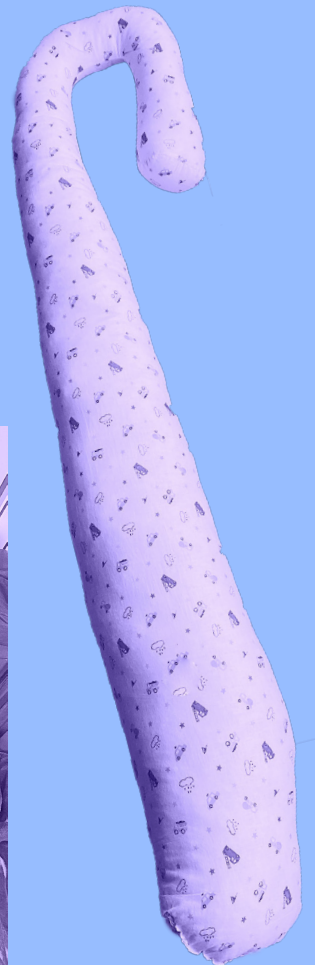


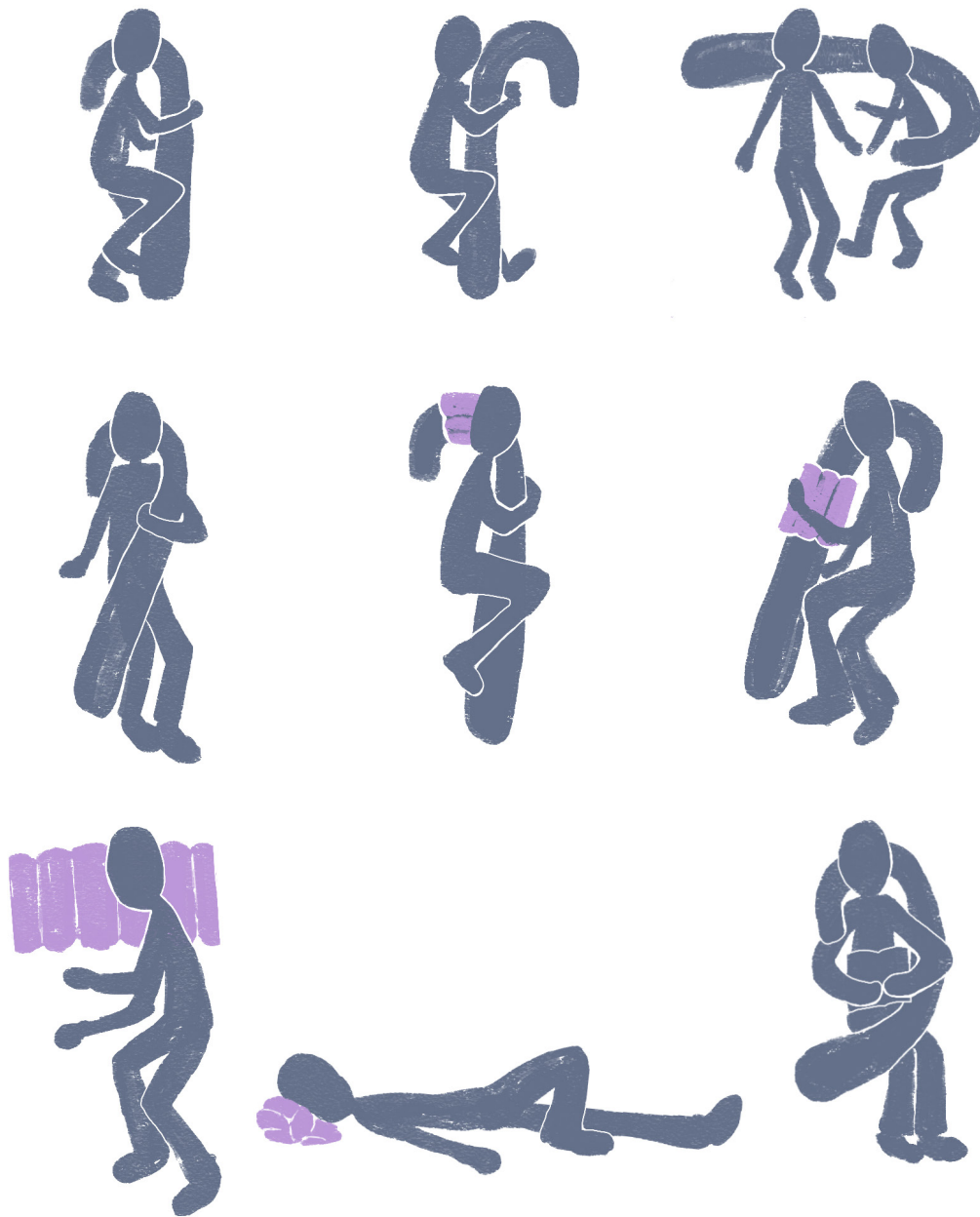


Prototype2



Prototype3

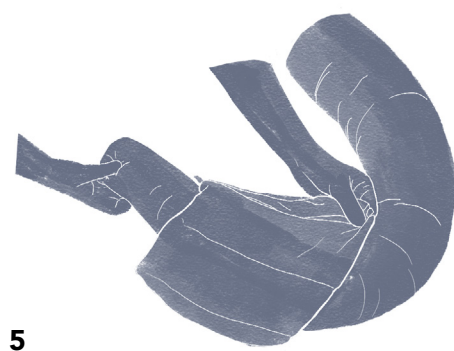




Unlike existing hugging pillows with limited ways of use, Snuggli can be used more than one way, whether to hug it on the side during sleep or wrap around the neck in a seated position. The user can also share it with others for a fun experience which welcomes young adults to relieve stress with another person on the side. Besides sleeping with it, Snuggli can be used in seated positions in which it hooks up the user's neck and the rest of the pillow may rest on one's legs for comfort.

Users generally have various preferences of using the product. Therefore, an add-on pillow allows young adults to adjust upon their using experience. Inspired from the Chinese culture of using buckwheat hulls as stuffing, buckwheat seeds are believed to offer therapeutic benefits far superior to traditional foam and feather pillows (Hernandez, 2019).

Different from the stuffing of the main body part, the add-on pillow is stuffed with this plant-based material for a stronger support over the neck. When testing with users, the original pie shaped add-on is always moving away from the main pillow as users turn around their heads. After several revisions on the appearance of the add-on pillow, its shape is changed from a round pie to a rectangular form that is divided into sections so the buckwheat hull stuffing will not move around when pressure is applied.



Inspired by the kids toy of a wire bead maze, one add-on piece is made in the shape that users can adjust or change position upon their preferences. This way, the experience of using the hugging pillow involves more participation from the user to lower their stress while playing with the product. The ornamental appearance of the add-on pieces caters to young adults who always look for unique and playful products. Users can choose the color of the add-on when purchasing the product.

Moreover, the pattern of the pillow can be tailored simply and mass-produced in the factory. The stuffing inside the hugging pillow is purely cotton and fabrics are made from organic material which can all be recycled after use. Additionally, add-on pillows are stuffed with buckwheat hulls that are completely plant-based material.

After rounds of user testing and revision, the final design is settled to achieve a comfort experience and desired stress relief outcome for the user. Two identical prototypes are made and distributed to two adults at a time, one male and one female, for two days to test the functionality. Eight young adults in total have participated in the testing process. Five out of eight users prefer to have the add-on pillow during sleep which gives more support over the neck. Three people claim that they prefer to take off the add-on pillow and rest on the original hugging pillow with a softer headrest. All users state that they enjoy having both soft and hard pillows, which gives them more options. The length of Snuggli effectively allows users to rest the entire body from head to toe.





To conclude, a need of stress relief among young adults is rising, which points to an emerging new role for designers to come up with fascinating products for use. If well understood, the aim of the hugging pillow is not only to access the benefits of hugging and create a sense of peace but also achieve better sleep and relieve pressure points of the body. The final product Snuggli fulfills the design goal, which is to effectively alleviate stress and improve the quality of sleep among young adults.

Final Prototype









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