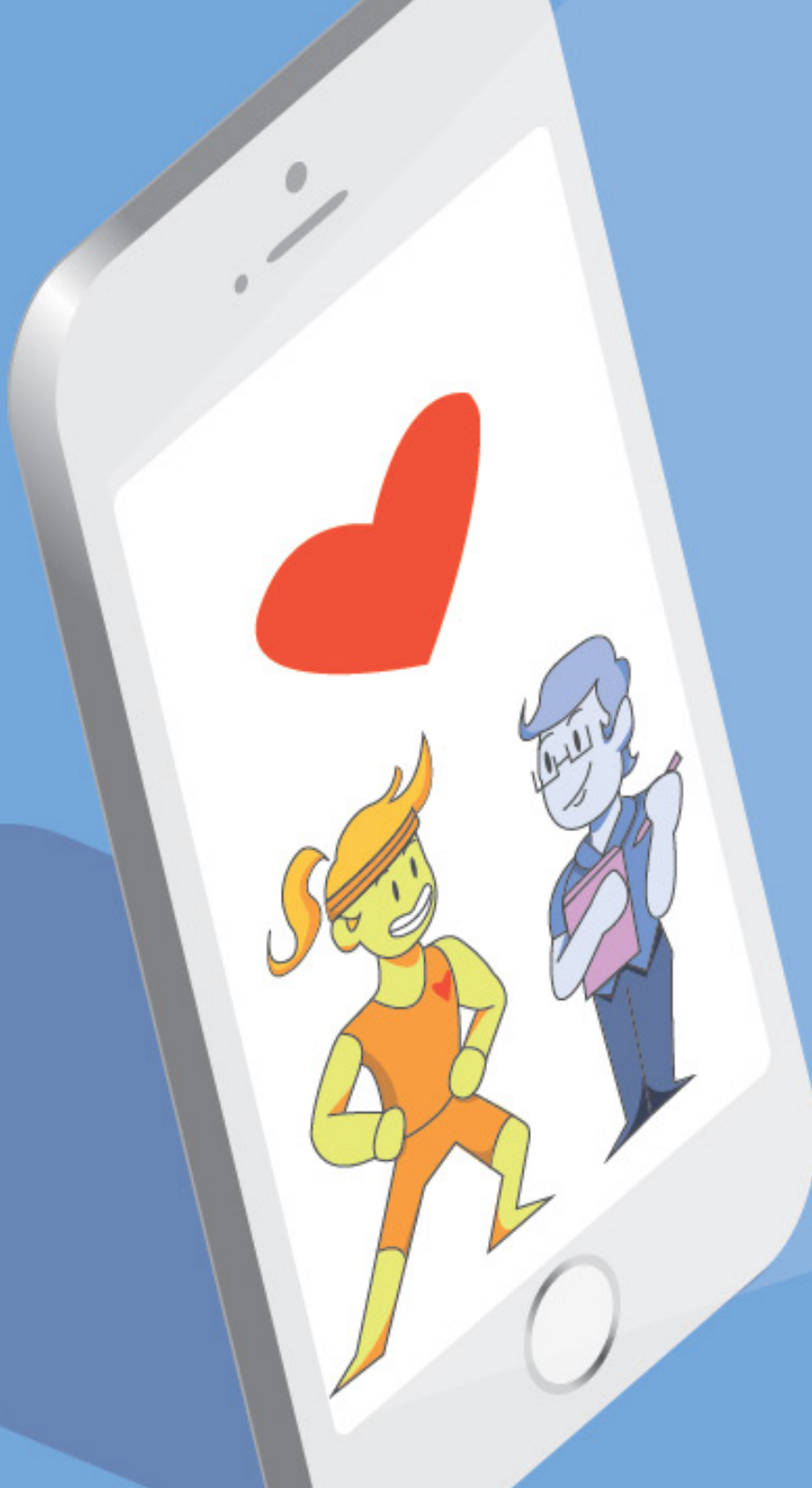


Rosemary Tenemas

An App a Day

How effective are physical and mental health apps?



An App a Day

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In 2014, the Health app for the iPhone was introduced to organize and access important health information easier, but how much is that true for mobile health apps (mHealth)?

The estimated 4.5 million apps available in the Google and Apple app stores, a million were categorized as Health and Fitness. MHealth apps are increasingly gaining popularity, with more than 500 million people worldwide downloading more mHealth apps onto their phones. Between 2014-2017, studio and fitness segment have grown 830% as fitness apps which increased by 330%. The increase in demand is due to users desire to exercise at home without special equipment. There has also been an increased interest in mental health and wellness, with apps such as Calm ranking first in Australian iPhone users.

How do mHealth apps Work?

Physical health apps can focus on an individual's fitness or diet. Like a personal trainer, the apps help the user set fitness goals, gather workout ideas and promote healthy behavior. This role mainly applies to fitness and workout apps. Another feature of these apps is tracking. Functioning like virtual notebook, the apps

track the user's caloric intake, nutrition benefits, steps, exercise regimens and sleep patterns. A major element used in the mHealth industry is gamification. Coined in 2008, gamification is the use of game like elements, such as rewards and incentives, in the commercial world. This tactic is used to increase motivations and sustain healthy habits of individuals over time, through game like rewards and incentives.

Similar to physical health apps, mental health apps act like a digital life coach or counselor or therapist.

Some mental health apps are based on evidence-based therapeutic techniques such as Cognitive therapy, Behavior therapy, Mindfulness therapy, Acceptance and commitment therapy.

Cognitive Behavioral Therapy (CBT) is the most commonly used approach in mHealth. CBT focuses on identifying and challenging negative patterns of thoughts and behavior, improving emotional habits and developing personal coping strategies. Another popular strategy used is Mindfulness therapy. It focuses on teaching people to consciously be aware of our thoughts, feelings and actions in the present moment

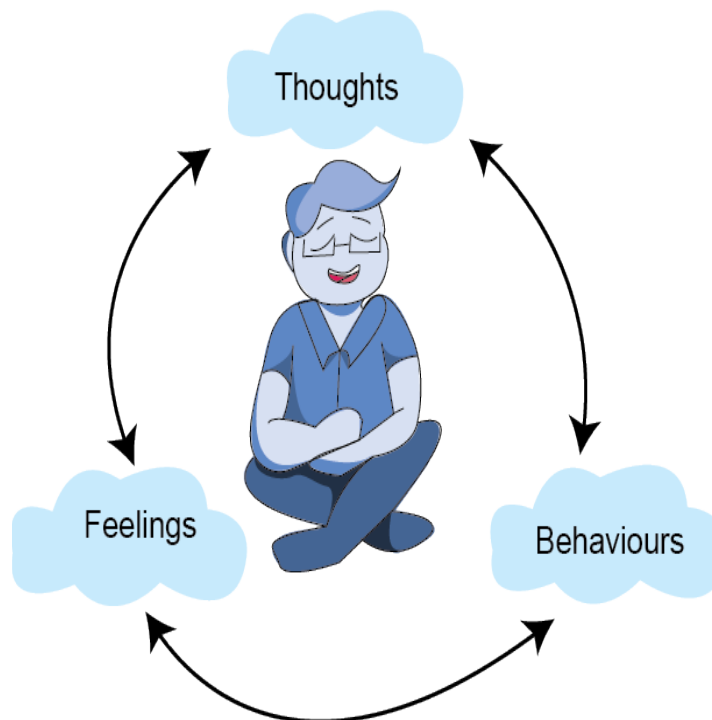


without judgment. These mindfulness apps train the user through meditation techniques and exercises. These strategies are commonly used to ease symptoms of depression, anxiety, eating disorders and severe mental illness.

Do they Work?

Some research suggests that fitness apps do work when they're personalized to the user, such as training goals and specialized diets, the results are more effective as people are more motivated to work out. The Journal of Medical Internet Research conducted a study where they surveyed 726 participants in 3 groups based on their use of fitness apps. They discovered that fitness apps do promote positive behavioral changes with 75% of current app users being more active opposed to non-users and former users. They also discovered that participants are more likely to exercise during their leisure time and found it easier to overcome usual exercise barriers (procrastination, lack of motivation, etc.).

There is debate around efficiency of mental health app, due to lack of evidence. Several studies compared the Headspace to another mHealth app. Participants reported, after using Headspace, to have an improved mental health, while others reported the opposite. Another study concluded that mobile apps have the



CBT focuses on how thoughts, behaviours and feelings effect each other.

potential to deliver high efficiency mental health interventions, but for this it requires the mobilization of science, regulation and design. It states that challenges such as poor regulation of quality and privacy, engagement and focus on a single disorder per app. They suggest integrating characteristics such as, high patient engagement, simple user interface and experience and self-monitoring features.

The iPhone health app has promised to promote healthier habits and easier information management, like the other million mHealth apps, but only 300,000 of the apps may be regarded as genuine mHealth apps. A majority of research, support the statement of the promotion of health. However there is still more research to be performed in order to create highly effective mHealth applications, that is engaging and evidence based.

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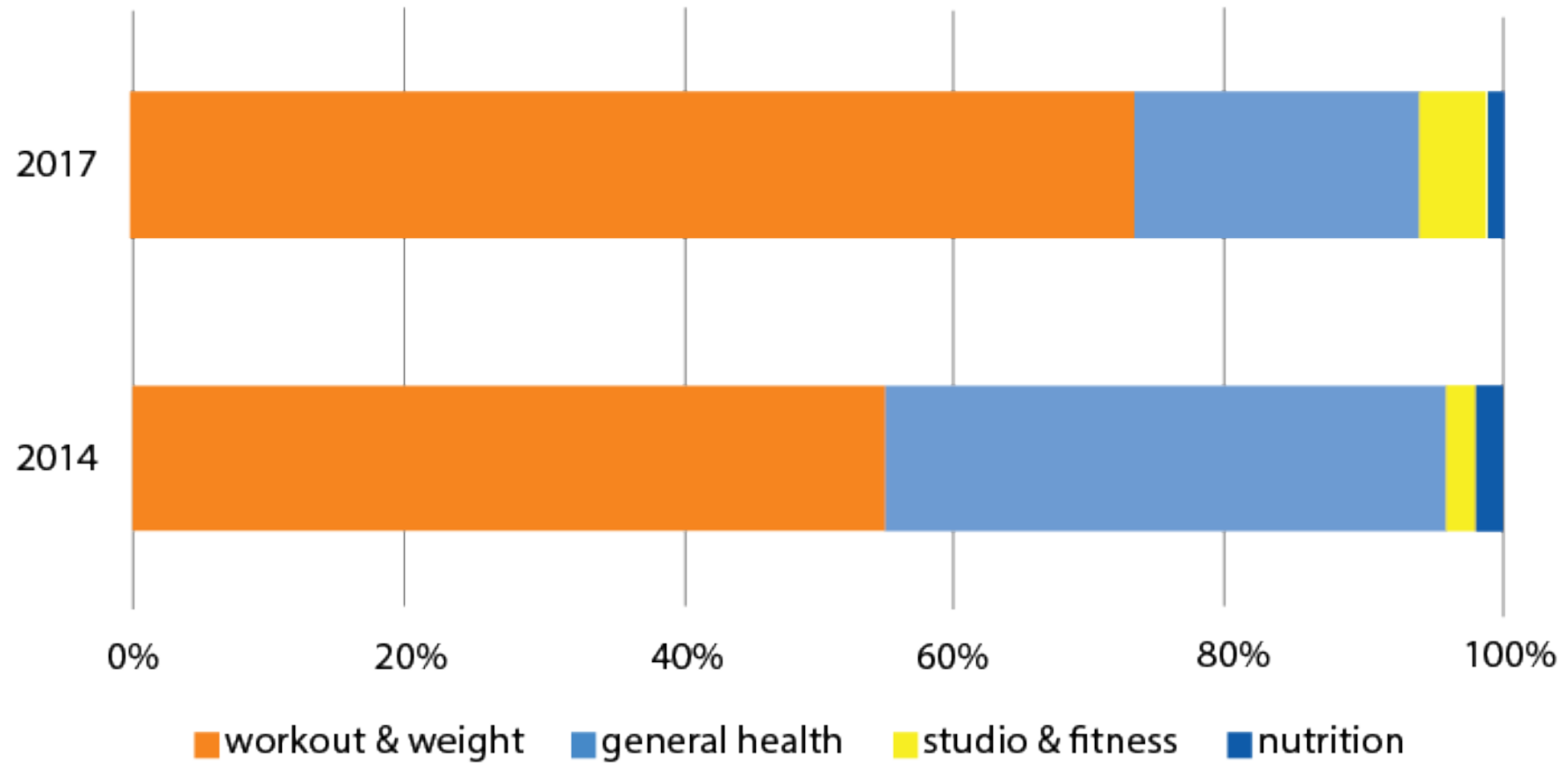
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mHealth App Usage By Category



Change in Behavioral Habits when using mHealth apps

