Personality as a Predictor of Usage of Wearable Fitness Trackers

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ABSTRACT

Personality types play a crucial role in determining the usage of wearable fitness trackers. People of different personality types respond contrariwise toward urge for using wearable fitness trackers, setting goals, monitoring their own physical activities and rejoicing accomplishment of set objectives by sharing the outcomes with friends and family members. This article provides an incisive view regarding the extent to which personality types might predict the usage patterns vis-à-vis wearable fitness trackers.

Keywords: personality types, wearable fitness trackers, youth, health and wellness, India

INTRODUCTION

Fitness is crucial for physical and psychological wellbeing of the people. It is at times strange to observe that despite being aware of the fact the physical inactivity is a major cause of ill-health throughout the industrialized countries; a sizeable population do not perform any type of exercise or physical activity. Furthermore, number of people involved in any sort of fitness program in India is abysmally low. Hence, the Indian Prime Minister Mr. Narendra Modi launched the ambitious Fit India Movement in the year 2019 to motivate the people to keep

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themselves fit and actively participate in physical activities as integral part of their daily routine. While a large population in India do not get much time to exercise, the researchers observed that the people generally prefer basic forms of exercise, where majority of them choose to do brisk walking (Prabhudev, 2019). The other forms of exercises like Yoga, Pilates, Cross-fits, Cardio, and Bodyweight are practised by relatively lesser percentage of people involved in any formal or informal exercise regimen (The Times of India, 2019).

Interestingly, the wearable fitness trackers have caught the imagination of the youth inclined towards physical activities. These wearables help them keep a tab on their physical activities in terms of setting goals, monitoring milestones and accomplishing the set objectives. Young people starting physical activities as a routine are often motivated by the wearable fitness trackers to continue their regimen. Faster adoption of wearbale fitness trackers in India has provided a unique opportunity to the developers of wearables to enter into the ever-growing Indian market. India has now emerged to be the third-largest market for wearables in the world, ranking just behind China and the US. The wearable market in India grew to 123.6% in the year 2019 as compared to 2018 (Business Today 2019). CAGR has projected the growth of global business tracker market to reach to $62,128 million by the year 2023 (Allied Market Research, 2018) while in India this wearable segment is expected to rise up to $65.4 million by the year 2024 (Statista, 2021). These wearables are not just restricted to athletes but have extended to every individual who is interested in good health and fitness.

In India, prices of the wearable fitness trackers range from INR 1000 to INR 30,000. This gives a wide range of prices to the users to choose, based on their affordability and utility. These wearable fitness trackers provide a variety of features like heart rate monitoring, SpO_2, calorie, sleep, and also gives an in-depth data to its users. The devices can be synced with mobile and thus can provide trend analysis of data. These devises allow its users to connect their wearables to mobile or computer through wireless and thus facilitate sharing of data with their community. Availability of low-priced wearable fitness trackers has augmented their popularity and usage. However, despite the phenomenal growth of wearable fitness trackers in India market, it still remains intriguing to explore the personality types of the people who adopt and continue to use wearables to track their fitness and health. Technology acceptance model has shown that human beings adopt new technologies only when they

believe that the new technology would be of some use to them (Davis, 1989). It appears that Indians are finding some utility in the wearables which is reflected in the inorganic rise of this market over the years. However, not much research has been conducted to find out whether personality types have any role in determining the purchase and usage patterns of wearable fitness trackers.

RELATED WORK

B. F. Skinner in his operant conditioning theory of learning mentioned the concept of stimulus and response. Skinner elaborated that the behaviour is a function of its consequences. The fitness trackers, by allowing users to track and monitor their health and physical activities (consequences), encourages a positive action of repeat behaviour of continuing with efforts to increase steps, duration of physical activities etc. Scholars observed a significant enhancement in the number of daily steps, moderate and vigorous physical activities, and energy expenditure in the participants who used wearable fitness trackers (Brickwood et al., 2019). Other studies have also hinted at modest positive impact of wearables on the intensity of physical activities of users (Bort-Roig, 2014; Ridgers et al., 2016).

Although researches on influence of personality types on usage patterns of wearable fitness trackers is scant, differences in terms of people's choices vis-à-vis attitudes towards physical exercise and awareness about their health present a strong rationale for the inevitable linkage between the two. A research indicates that those scoring high on emotional stability, extraversion, openness, agreeableness and conscientiousness tend to be regular in their physical exercise (INVISION, 2007). Further, studies also reveal that self-motivated people have a higher probability of continuing with their exercise regimen and finally enter the state of flow (Ackerman, 2020).

Interestingly, personality has been observed to have a large impact on the usage of wearable fitness trackers. In a study it was observed that people scoring low in conscientiousness reported association with negative affect while using a wearable (Ryan et al., 2019). On the other hand, people with other personality types were observed to reflect negative affect when they were unable to use their devise (Ryan et al., 2019). Leaving aside the other personality types, people with openness to experience and those scoring low on

conscientiousness showed high risk of negative psychological consequences of wearable usage (Ryan et al., 2019). Yet another research reveals that the people high on openness were observed to adopt wearables because of their high levels of curiosity; whereas those high on neuroticism were found averse to adopting the wearables in case they did not find any unique benefits from them. Extraverts, on the other hand, adopted wearables only if they felt it would lead them to increase their social affiliation (Rauschnabel et al., 2015).

The greatest benefit of these wearables is that they allow users not only to set goals but also to share their achievement with their community. It was observed that specific and measurable goals help individuals describe their acceptable level of performance. Furthermore, in another study, behavioural changes were observed when persuasion tools were used to achieve goals (Lin and Mann, 2012). Those scoring high on Openness and conscientiousness expressed significant relationships with persuasion technologies. These technologies were least desirable for the ones scoring high on agreeableness (Halko and Kientz, 2010). Thus, those have dominant openness or conscientiousness can be persuaded to achieve goals, even if it means stretching a little.

However, despite the immense benefits of wearables, it has been observed that people lose interest and then finally stop using these fitness trackers after six months (Dahl, 2015). This again is a matter of interest to find out why people quit using these wearables and is there any particular category of people who quit these wearables? This could be either because people of some category of personality do not find utility of the wearables. People who exhibited agreeableness type of personality were observed to have a higher tendency to use technology while those with neuroticism type of personality found technology less useful (Özbek et al., 2014). Individuals with relatively stable personalities were found to have higher levels of dislike for the idea of being controlled by some sort of technologies (Kim and McGill, 2011; Fast et al., 2009; Galinsky et al., 2003). Out of the five personality types (see Table 1), extroversion, conscientiousness, and emotional stability were observed to have a direct positive relationship with autonomy, a component of self-determination theory (Ramsey and Hall, 2016).

Table 1: Personality Types

Personality Types	Characteristics
Neuroticism	Distinguishes the stability of emotions and even-temperedness from negative emotionality, which can be described as feeling nervous, sad and tense.
Conscientiousness	Suggests self-use of socially prescribed restraints that facilitate goal completion, following norms and rules, and prioritizing tasks.
Agreeableness	Distinguishes pro-social and communal orientation toward others from antagonism and includes traits such as altruism, trust, and modesty.
Extraversion.	Suggests a lively approach toward the social and material world and includes traits such as sociability, activity and assertiveness
Openness	Describes the wholeness and complexity of an individual's psychological and experiential life.

(Source: The Big Five factors (John, Naumann, Soto, 2008)

DISCUSSION

From the extant literature, it appears that various personality types determine the probability of adoption and usage of wearable fitness trackers. Furthermore, the tendency to quit the usage of fitness trackers can also be explained using self-determination theory which mentions three fundamental psychological needs for an individual to be intrinsically motivated (Deci and Ryan, (1985). These three needs are autonomy (a feeling of control over one's life), relatedness (feeling of connecting with others and a feeling of belongingness), & competence (perception of ability to interact with the world). Motivation in an individual is largely determined by the extent to which these needs are satisfied (Deci and Ryan, (1985). It may be thus understood that the tendency to adopt and continue to use a technology could be attributed to the intrinsic motivation of an individual (Juodkūnė, 2015).

CONCLUSION

From this study, it becomes all the more apparent that the certain personality types determine the possible adoption and usage of wearable fitness trackers. For example, individuals with agreeableness as a personality trait were observed to have a higher tendency

to use technology while those with a trait of neuroticism were found to be averse to using technology. In the same way, other personality traits also had varied influence on adoption and usage of wearable fitness trackers. While wearable fitness trackers were observed to have a general appeal among the users as a catalyst encouraging them to participate more actively in physical exercises, various personality traits showed distinct differences in attitudes towards them. This study has significant managerial implications both for HR and Marketing functions. In HR, results of this study can be used to plan technology adoption program based on personality types of the employees while in Marketing, it can really help in targeting the potential buyers of the wearable fitness trackers based on personality traits by creating trait-appropriate advertising campaigns.

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