ABSTRACT

The 2014 World Health Organization report estimated that worldwide, nearly 38 million people die every year due to non-communicable diseases like cancer, diabetes, chronic respiratory and cardiovascular diseases. These lifestyle related diseases is estimated to have claimed nearly 8.5 million lives in the South East Asian Region (SEAR) and accounted for about 60% of all deaths in India during the year 2014, inflicting net losses in national income estimated to be nearly USD 336.6 billion between the years 2005 and 2015. Fortunately these diseases are preventable and potentially their impact can be minimized by preventive measures. However this entails a considerable amount of behavior change, making the implementation of preventive healthcare related interventions, a humongous challenge. Hence any course correction or preventive healthcare related intervention would prerequisite the need to change persistent beliefs for which it is imperative to understand the its determinants. These determinants can either be intrinsic or extrinsic in nature or a combination of both and can vary, relative to age, gender, and education levels. In this context, intrinsic determinants mean factors or causes that are inherent or inseparable from self. Extrinsic determinants on the other hand are those that are external, not inherent, and are separable.

In order to understand the intrinsic determinants, a study was undertaken based on the ‘preventive health care behavior model’ proposed by Jayanti Rama K. and Burns. Alvin C. (1998). The intrinsic determinants considered for the study were health motivation, health knowledge, health consciousness, self efficacy, response efficacy and health value. The findings indicated that age has a bearing on only one of the six determinants proposed in the model i.e. ‘self efficacy’. It also indicated that whilst gender had no major role to play, education did. Higher levels of education resulted in enhanced amount of health consciousness, health value and self efficacy related to preventive measures which cumulatively improved behavior towards the preventive aspects of health.

With regard to the extrinsic determinants of preventive healthcare related behavior change, a total of six incentives which included therapeutic counseling, monetary incentives, professional involvement, family support, community cooperation and information assimilation & dispensation were identified. These were
then tested as a part of this research effort. The results of understanding the association between variables indicated that the extrinsic determinants have a strong correlation with education levels. Graduates and above, were found to be in need of professional involvement, family support and information assimilation & dispensation to improve their behavior pertaining to preventive care. Age and gender had minimal or absolutely negligent contribution in the analysis.

However the attempt to assess how intrinsic and extrinsic determinants interactively influence preventive healthcare behavior demeaned the role of ‘self efficacy’ in promoting this behavior. Never the less it established an understanding that when extrinsic determinants like professional involvement, family support and information assimilation & dispensation are employed in the context of preventive healthcare, the value and consciousness that an individual attaches to preventive aspects, increases phenomenally, which in turn improves behavior towards preventive healthcare. This laid the foundation of the ‘Preventive Healthcare Pragmatic Model’ which found statistical validation.

The model was then viewed under the light of morality and it was found that a conceptual correlation existed between the Kantian ethics and the basic ethics supporting the constructs of behavior-change as a core concept. The outcome of comprehensive understanding was the ‘Behavior Change Grid’ which would effectively map extrinsic objectives to intrinsic goals across time, with information as a tool. This grid is not only premised to change the behavior related to preventive healthcare but is anticipated to have valuable applications in other commercial arenas as well.

On the basis of the ‘Behavior Change Grid’, an action packed solutions-framework imbibing the essence of the TOC (Theory of Change) was designed to facilitate the desired changes. The blueprint of this framework which can facilitate behavior change and preventive health empowerment, referred to as the HealthShield Program was detailed. The architectural base of the HealthShield framework which is an engagement model with the customer as its fulcrum, behavior change methodologies and engagement objectives on either ends, also finds illustration.

The newly proposed, ‘Customer Engagement Model’ supported by the ‘Behavior-Change Grid’ was also customized for adaptation in the e-commerce space. To this end the framework of the ‘E-Comm Shield Program’ was designed of which ‘The Citizen Responsibility Plan’ is a part.
A ‘social responsibility’ backed reward-strategy was recommended as an initiative to redress some of the broad level social concerns. For the effective record keeping of social responsibilities, a ‘Citizen Responsibility Calculator’ was proposed. It was recommended to be developed based on the Raft Consensus Algorithm, using either the introspective or the extrospective variables. It was also suggested that the proposed methods should be tested using ‘Asymptotic Analysis’ for accuracy and efficiency. The resultant ‘score bands’ was proposed to be used as indicators for customer related business decisions in the e-commerce space.