Chapter XXX
Understanding Computerised Information Systems Usage in Community Health

Farideh Yaghmaei
Shadeed Behesthi University of Medical Science and Health Services, Iran

ABSTRACT

This chapter introduces factors that affect computer usage. Discussions of computer systems effectiveness or system success frequently focus on questions of which factors provide better system usage. As there are many factors that affect computer system usage, measuring the influence of the factors is necessary. The objective of the current study was to gain a further understanding of some factors that affect the use of computerised information systems. Most studies have been in business and few studies have been conducted in the health sector and specifically in community health. The study measured the role of external variables on computer attitude, subjective norms, and intention to use computers based on the theory of reasoned action (TRA) (1). These external factors included: demographic characteristics, users' characteristics (computer experience), organisational support, and involvement.

THEORY OF REASONED ACTION (TRA)

The Theory of Reasoned Action (TRA) was developed by Fishbein and Ajzen (1975) (Figure 1). The foundation of this theory rests on the distinctions between beliefs, attitudes, intentions and behaviour. The theory shows the relationship between beliefs and behaviour through attitudes, subjective norms and behavioural intentions.

- **Beliefs:** Beliefs are formed by direct observation, outside information, or the way a person learns about an object. For example, new information from any source (such as; environment) may influence a person's beliefs.

Figure 1. Theory of Reasoned Action (TRA). Source: Ajzen & Fishbein (1980)
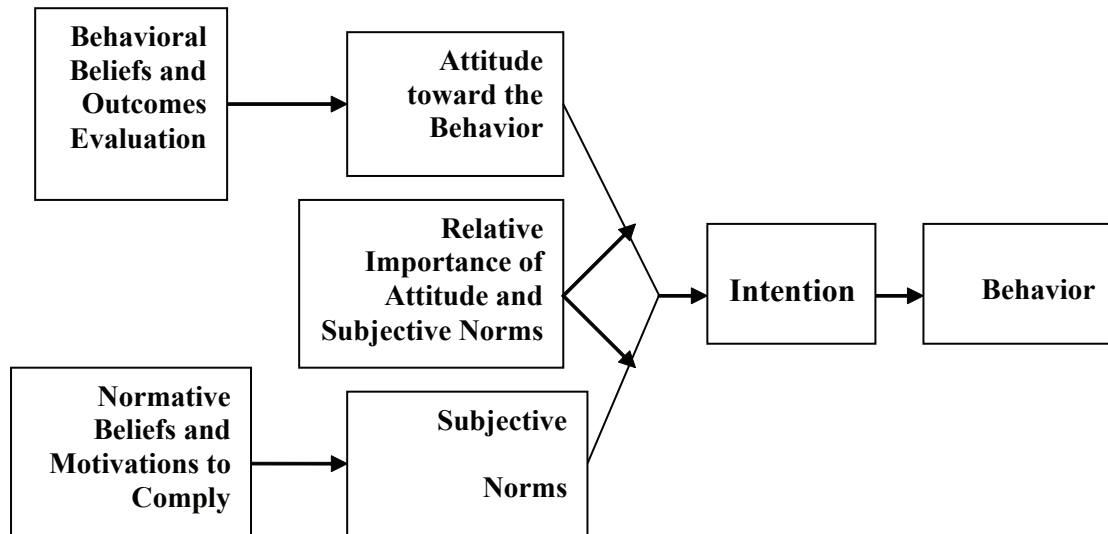
- **Attitude:** An individual's attitude towards any object is a response to beliefs about the object so beliefs are important in determining attitude. It can be stated that attitudes are based on a person's beliefs. Attitudes may influence the formation of new beliefs about objects.
- **Subjective norms:** Fishbein and Ajzen (1975) proposed that the formation of intention depends on the previous formation of attitude and normative beliefs.
- **Intention:** The effects of attitude (A) and subjective norms (SN) on behaviour are mediated by the behavioural intention (BI). According to the TRA, intention is the immediate determinant of behaviour and can lead to actual behaviour.

EXTERNAL VARIABLES

The external variables can influence in three ways; 1) influence on attitudes and significant amount of weight on intention, 2) influence on the subjective norms and significant amount of weight on intention and 3) influence on the relative weights of the two components (attitudes and subjective norms).

Methods

For the purpose of the present study the following hypotheses were defined (see Figure 2).

After a thorough search of the literature the researcher found valid and reliable scales for measuring the above variables. A questionnaire that consisting of 62 questions that covered users' characteristics (positive and negative subjective computer experience) (Yaghnaie 2007), management support, (general support and information centre support) (Igbaria and Chakrabarti 1990), users' involvement (importance and personal relevance) (Barki and Hartwick 1994), computer attitude (Jayasuria and Caputi 1996), subjective norms (Hebert 1994) and intention to use computers (Hebert 1994) was used.

Then study was conducted in the Community Health Services of one Area Health Service in New South Wales, Australia. The questionnaires were mailed to 430 staff (nurses and health workers) in

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