

Intentional Conceptual Framework: Factors Affecting Stakeholder-Attitudes Towards Autocidal Trap Technique in Dengue Prevention.

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Abstract

The fact that dengue occurrences are rising every year is proof that existing preventative methods like fogging and Abate are inadequate. There are currently several other methods for avoiding dengue, such as autocidal traps. However, before putting these methods into practise, it is important to consider public approval to seek the support of public. In order to apply this application and meet the criterion for dengue eradication, it is crucial to consider the public's aspirations. Based on earlier investigations, this multidimensional survey instrument that evaluating application intentions for autocidal traps, as well as the variables that influence such intentions, was created and validated.

Keywords: Strategic, Conceptual Framework, Behavioural Intention, Factors Affecting, Autocidal trap, Malaysia

Introuction

Public support, as demonstrated by their intention to embrace uses of the technology, is primarily dependent on the launch of a new technology and application. According to Flynn (2007), forecasting how new technologies will be used and adopted by humans is crucial for the advancement and success of those technologies. If technology may assist society, it is crucial to comprehend how people will utilise it and if they intend to do so. However, there is a long and complicated history in the link between technology advancement and societal responses. According on the technical application area, research has found significant diversity in societal reactions. Prior research suggested that intentions effectively predicted a

range of action inclinations and showed a substantial positive link between intention and conduct (Salleh et al. 2015). According to Armitage and Conner (2001), intention is one of "the motivational factors that influence a behaviour and to indicate how difficult or how much effort people are willing to put into performing the behaviour."

Brehdahl's attitude model for GM foods (1999), which was based on Fishbein's multi-attribute attitude model (1963), and Pardo et al.'s attitude model towards biotechnology applications were the foundations for the conceptual framework employed in this. The components that are known to cause attitudes are used as the starting point for the models, and the variables are grouped according to their presumptive impacts on the following variables. The specific perceptions of risks and advantages (Chen & Li 2007; Grunert et al. 2000) and moral considerations (Amin et al. 2011; Gott & Monamy 2004; Sjoberg 2004) in this study affect the overall intention towards the implementation of pharmacogenomics.

Since previous research have shown that these variables provide causal interpretations to risk and benefit perception, general attitude characteristics including participation, trust in important players, as well as religion (Amin et al. 2011, 2014; Chen & Li 2007). The framework that must be built is indicated by the factors provided. The researchers think that this strategic conceptual framework is the response to their study questions, even though the addition of several elements makes the framework more complicated. Therefore, the objectives of this paper to:

- *explore the relationship between general and specific factors;*
- *explore the relationship between general factors and intention towards application of autocidal trap.*
- *explore the relationship between specific factors and intention towards application of autocidal trap.*

General Factors

1) Information seek behaviour

The previous and intended conduct, awareness, and knowledge are the three sub-factors that make up the engagement factor that was employed in this study. Based on a political science-inspired public concern, Gaskell et al. (2003) originally presented the notion. He discovered that the factor was consistently connected with stronger support for six uses of biotechnology when he applied the theory to public opinions of the technology. Policy makers and healthcare professionals were increasingly conscious of the necessity for public participation in scientific and medical concerns as the study on genomic medicine was conducted (Stilgoe et al., 2014; Samuel and Farsides, 2018).

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2) Trust in the key players

Most of the time, the general public must rely on information supplied by industry specialists to determine the advantages and disadvantages of a pharmacogenomics application. This occurs because the ordinary public typically lacks the knowledge, skills, and time necessary to fully comprehend the complexity of new technology, forcing them to rely on the information supplied by these specialists. This is also reinforced by Earle and Cvetkovic (1995), who said that in order to handle the hazards connected with technologies, consumers should depend on institutions and professionals. According to Pin (2009), trust was discovered to be a circumstantial predictor of the intention towards nutrigenomics. According to many studies (Frewer et al., 1996; Hansen et al., 2003; Horst et al., 2007; Slovic, 2000; Trumbo and McComas, 2003), people's perceptions of certain technologies will depend on how much they trust the key actors in the area. According to Amin et al. (2011), trust in key actors is one of the factors influencing Malaysian public attitudes towards agrobiotechnology. This finding suggests that people who trust key actors are more likely to accept, benefit from, and promote the application. Furthermore, Chen and Li (2007) found that social trust in institutions predicts both perceived risks and rewards.

3) Impact of technology

Religious views or practises, according to Chen and Li (2007), could be considered as a further indication of GM food acceptability in further investigations. According to Amin et al. (2011), Malaysian stakeholders have a strong affinity to their faith. The Canadian Trade Commissioner Service (2006) also made note of the fact that Malaysians of all faiths typically have strong religious attachments. Religion has been introduced as a variable that is significant for gauging public opinion on a new technology or problem.

Specific Factors

1) Perceived Benefits and Perceived Risks

Responses to new technologies are significantly influenced by how advantages and hazards are perceived (Ronteltap et al., 2007). The most significant determinants of public opinion evaluation have been found as perceived risks and rewards (Rowe, 2004). According to Frewer et al. (2004), people tend to see a behavior's or choice's risk as being lower when they experience a benefit from it. Due to its complexity, it is challenging to conceptualise perceived risks and rewards independently; in fact, various research have revealed that they are not independent and seem to be decided both endogenously and concurrently (Hansen et al., 2003; Rowe, 2004). Consumer acceptability may be lower if the perceived dangers outweigh the perceived advantages. According to Pin's (2009) research, people tended to be more appealing if they believed that personalised nutrition was beneficial to them. This boosted affect and reinforced intentions to take a test and adopt a diet.

2) Perceived Moral Concerns

According to certain studies, moral norms (individual ideas about good and evil) can significantly predict intentions, actions, and attitudes (Sparks and Shepherd, 2002). According to a study by Sparks et al. (1995), ethical concerns were a strong predictor of people's attitudes towards foods that had been genetically engineered. Moral standards should influence people's behavioural intentions in a predictable way (Dean et al., 2008). Furthermore, Gaskell et al. (2000) found that support for biotechnology applications seemed to depend on moral acceptability as a required criterion. Moral concern is a significant

predictor of risk perception and general attitudes towards GM foods in Malaysia, according to Amin et al. (2006, 2011).

3) intention towards autocidal trap application.

According to Siegrist (2000), a person's attitude and perception can influence whether they accept and support a technological breakthrough. Urban & Hoban (1997) also said that acceptance might be linked to an individual's values on a more fundamental level. The link between knowledge and individual understanding of science or technology is another method for comprehending support for technological progress in any discipline (Pardo & Calvo 2002). This is demonstrated by the strong support that the people of Bandung, Indonesia, have shown for the acceptance and application of the dengue vaccine in the future, when the perceived risk is based on the perceived benefits to the community, which are higher (Hadiosemarto & Castro 2013). In fact, research in Kaohsiung City, Southern Taiwan, also discovered that the support of the populace was quite strong when the use of aerosol pesticide sprays and ovi traps put in the house succeeded in lowering dengue cases from 60% to 20% (Hua Pai & Lieh Hsu 2014). Previous study by several scholars has also demonstrated a good correlation between engagement in biotechnology and the advantages and support of any use of biotechnology (Gaskell 2003, Pardo et al. 2002, Christoph et al. 2008, Latifah et al. 2011a, 2014).

Recommendations Of Strategic Conceptual Framework

Figure 1 illustrates the conceptual framework of the research model that contains three major constructs in predicting public intention towards application of autocidal trap. The first construct is called general factors and it consists of three components (information seeking behaviour, trust in key players and impact of technology). The second construct are also consisting of three components of specific factors (the perceived benefit, the perceived risk and the perceived moral concern). While the final and the main construct of this study refers to intention towards autocidal trap application in Malaysia.

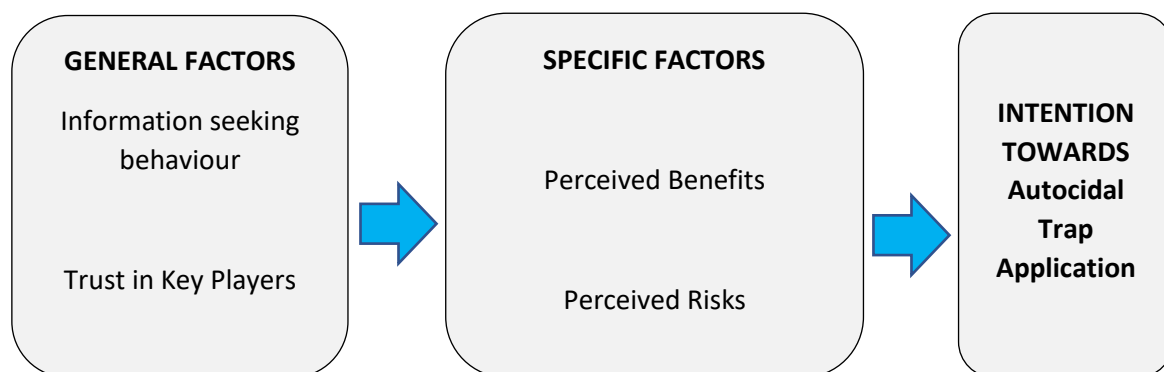


Figure 1. Strategic conceptual framework of factors influencing public behavioural intention towards autocidal trap application in Malaysia.

Based on this conceptual framework, the following propositions are made:

- P1 There is a significance relationship between general and specific factors.
- P2 There is a significance relationship between general factors and intention towards application of autocidal trap.
- P3 There is a significance relationship between specific factors and intention towards application of autocidal trap.

Conclusion

This paper aims to advance research knowledge and the body of literature on the creation of a strategic conceptual framework for addressing the issues of what influences public opinion about the use of autocidal traps in Malaysia. It is advised that a future research employ this conceptual framework to further the notion by carrying out quantitative investigations based on predictor variables. This conceptual framework may also be used as a foundation for investigations on intention determination. This study has offered a clear perspective of the predictor components in identifying the strategic idea of purpose towards application of autocidal trap in order to anticipate the behavioural intention towards autocidal trap.

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