




Examining the Gendered Aspects of Consumer Acceptance of an SMS-Assisted Smoking Cessation Program


Dr. Lynda Andrews	(QUT)
Dr. Judy Drennan	(QUT)
Dr. Silvia Cacho-Elizondo	(IPADE)
Dr. Vesséline Tossan	(EDC)



Overview

- Context and research objectives
- Theoretical framework and methodology
- Preliminary results
- Implications for practice


Dr. Lynda Andrews / Dr. Judy Drennan / Dr. Silvia Cacho-Elizondo / Dr. Vesselina Tossan



Context

- Real concern from Public Health Organisations and Families (*Scollo & Winstanley, 2008*)
- Move towards delivery of e-health services
 - Many countries are moving towards the delivery of e-health services that maximise the developments in information and communication technologies (ICTs).
 - Debate exists regarding how new technology for therapeutic ends should be deployed and how they can become sources of support and empathy rather than just informational (Graham et al, 2009).
- Difficulty to quit smoking.
 - *Different methods available but not one fully efficient way*
 - Limited account for any gender differences (De Meyrick, 2009) Yet, these differences do exist in health reports e.g. Australian National Health Survey (ANHS).


Dr. Lynda Andrews/ Dr. Judy Drennan/ Dr. Silvia Cacho-Elizondo/ Dr. Vesselina Tossan



Context

- With the extensive diffusion of the Internet, smoking cessation programs can now be offered through websites (e.g. Fritz *et al.*, 2008).
- More recently, the opportunity to combine mobiles with Internet cessation programs have been trialled and reported in the literature
 - e.g. Riley, Obermayer & Jersino (2008)
 - Obermayer, Riley & Jersino (2004).


Dr. Lynda Andrews / Dr. Judy Drennan / Dr. Silvia Cacho-Elizondo / Dr. Vesselina Tossan



Research Objectives

- To identify whether an SMS-assisted smoking cessation program would be acceptable to the general public in countries where it is not currently being trialed / used.
- To provide a basic, theoretical model that incorporates statistically generalisable measurements.
- To evaluate the influence of gendered beliefs on people's intentions towards the possibility of using such a service.

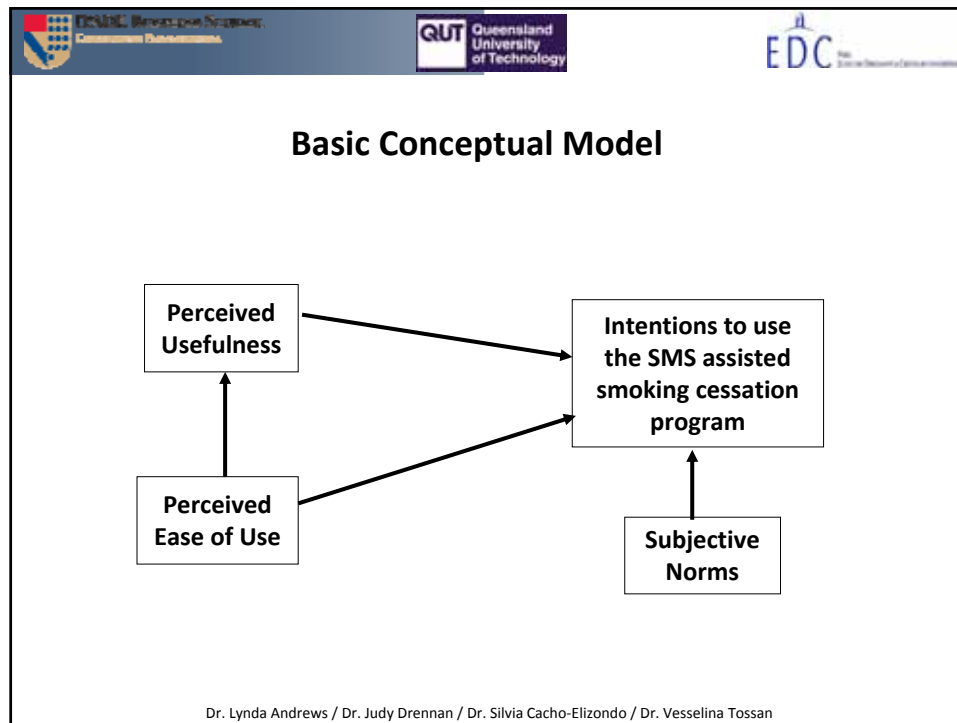
Dr. Lynda Andrews / Dr. Judy Drennan / Dr. Silvia Cacho-Elizondo / Dr. Vasselina Tossan






Theoretical Framework

- Lack of theoretical modeling (Whittaker *et al.*, 2008)
 - Need of more statistically generalisable measures
- Technology Acceptance Model (TAM) (Davis, Bagozzi & Warshaw, 1989) is used.
- Core constructs
 - Perceived ease of use.
 - Perceived usefulness
- Subjective norms – (e.g. Ramsey and Hoffman, 2004; van den Putte, Yzer, and Brunsting, 2005 suggest their importance in quitting smoking).

Dr. Lynda Andrews / Dr. Judy Drennan / Dr. Silvia Cacho-Elizondo / Dr. Vasselina Tossan



-
- Methodology**
- **Three online surveys: France, Mexico and Australia.**
 - French and Mexican surveys were translated by native speakers from the English version.
 - Each survey was only available for completion in its designated country.
 - **Main topics**
 - Smokers perceptions.
 - Smokers beliefs.
 - Smokers intentions to use the SMS-assisted program.
- Dr. Lynda Andrews / Dr. Judy Drennan / Dr. Silvia Cacho-Elizondo / Dr. Vesselina Tossan








Analysis

Multiple regression analyses were run to examine the relationships among

- *perceived ease of use*
- *perceived usefulness*
- *subjective norm*
- *intention to use an SMS assisted smoking cessation program*




Dr. Lynda Andrews/ Dr. Judy Drennan/ Dr. Silvia Cacho-Elizondo/ Dr. Vesselina Tossan

Sample Characteristics

Characteristics	France n = 119	Mexico n = 423	Australia n = 450
Males	48%	72%	48%
Females	40%	25%	52%
Age clusters	70% in 18-25yrs range	Slightly higher representation in 31-40 years range	Spread quite evenly over age groups 18 – over 55 years
Addicted to nicotine	67%	61%	88%
Intention to quit in 6-12 months	36%	52%	71%
Use of mobile phones for voice calls every day	74%	73%	74%
Send SMSs	89%	88%	91%




Dr. Lynda Andrews / Dr. Judy Drennan / Dr. Silvia Cacho-Elizondo / Dr. Vesselina Tossan

Preliminary Results

Factors influencing French women and men's intentions to accept this e-health program					
Gender	Country	Perceived usefulness	Subjective norms	Perceived ease of use	Explained variance
Women	France	β .678 p<.00	No influence	No influence	69%
Men	France	β .681 p<.00	β .206 p<.05	No influence	57%




Dr. Lynda Andrews/ Dr. Judy Drennan/ Dr. Silvia Cacho-Elizondo/ Dr. Vesselina Tossan






Preliminary Results

Factors influencing Mexican women and men's intentions to accept this e-health program					
Gender	Country	Perceived usefulness	Subjective norms	Perceived ease	Explained variance
Women	Mexico	β .662 p<.00	β .201 p<.01	β .141 p<.05	78%
Men	Mexico	β .697 p<.00	β .233 p<.00	No influence	76%

Dr. Lynda Andrews / Dr. Judy Drennan / Dr. Silvia Cacho-Elizondo / Dr. Vesselina Tossan










Preliminary Results

Factors influencing Australian women and men's intentions to accept this m-health program					
Gender	Country	Perceived usefulness	Subjective norms	Perceived ease	Explained variance
Women	Australia	β .746 p<.00	β .155 p<.00	No influence	76%
Men	Australia	β .640 p<.00	β .230 p<.00	No influence	64%

Dr. Lynda Andrews / Dr. Judy Drennan / Dr. Silvia Cacho-Elizondo / Dr. Vesselina Tossan






Summarising preliminary results

- **Perceived usefulness** of the smoking cessation program is the major influencing factor for both genders in all three countries in this basic model
- **Perceived ease of use** has no influence for French, Mexican or Australian men on their intentions to use such a program. Additionally no influence on French or Australian women.
 Scenario of program was probably perceived as straightforward and links to familiarity with the use of SMS.
 - For Mexican* women **Perceived ease of use** is a significant factor in addition to **Perceived usefulness** and SNs.

* Mexican women under-represented in sample.

Dr. Lynda Andrews/ Dr. Judy Drennan/ Dr. Silvia Cacho-Elizondo/ Dr. Vesselina Tossan




Summarising preliminary results

Subjective norms were significant for every group, except for French women.

- Subjective norms identified as an important factor in influencing smokers' intentions to use the SMS-assisted smoking in our model.
- Suggests smokers are more likely to consider quitting if they think that people whose opinions they value believe that they should.
- But what is it about French women?

Dr. Lynda Andrews/ Dr. Judy Drennan/ Dr. Silvia Cacho-Elizondo/ Dr. Vesselina Tossan



Summarising preliminary results

Overall findings from the parsimonious TAM approach shows that there is a favourable intention towards using an SMS-assisted smoking cessation service if it was available in the countries studied – although there is a need to be aware of how *perceived ease of use* might impact on women in country of interest.

Additionally, subjective norms were important to both genders in Australia and Mexico and for men in France, but not women. Generally, demonstrates the importance of normative support in quitting smoking.

Dr. Lynda Andrews/ Dr. Judy Drennan/ Dr. Silvia Cacho-Elizondo/ Dr. Vesselina Tossan

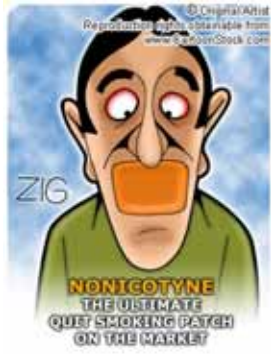
IMPACT: International Program
Communication Development

QUT Queensland University of Technology

EDC The Eastern Districts Centre for Entrepreneurship

Implications for e-Health practitioners

- To design services in ways that clearly demonstrate the usefulness in both the ease of using of the program and the technology that facilitates it.
- To encourage engage of important referents in assisting the user.
- To ensure capturing insights into whether or not using referents benefits the intervention outcomes – particularly between genders in country of interest



© Original Artist
Reproduction rights obtainable from
www.CartoonStock.com

ZIG

NONICOTYNE
THE ULTIMATE
QUIT SMOKING PATCH
ON THE MARKET

Dr. Lynda Andrews / Dr. Judy Drennan / Dr. Silvia Cacho-Elizondo / Dr. Vesselina Tossan


IMPACT: International Program
Communication Development

QUT Queensland University of Technology

EDC The Eastern Districts Centre for Entrepreneurship

Implications for e-Health marketers

- Marketing communication strategies aimed at smokers and their referent group to demonstrate usefulness of SMS-assisted smoking interventions.
- Test market to evaluate for gender differences in how marketing campaign is perceived.
- Ensure design of SMS-assisted smoking intervention is simple for any mobile phone users to navigate.



© Original Artist
Reproduction rights obtainable from
www.CartoonStock.com

"I am smoking. There's an app for that."

Design peer-to-peer apps that enable users to be encouraged by their family and friends

Dr. Lynda Andrews / Dr. Judy Drennan / Dr. Silvia Cacho-Elizondo / Dr. Vesselina Tossan

FNABE, Brazilian Network
of Consumer Researchers

QUT
Queensland
University
of Technology

EDC
The Center for Consumer Decision Research

Thank you!
Merci!
Gracias!



Dr. Lynda Andrews/ Dr. Judy Drennan/ Dr. Silvia Cacho-Elizondo/ Dr. Vesselina Tossan