

# Use of the Cochrane Library in Taiwan: the technology acceptance model to explore attitudes and barriers of health professionals

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# Background and Aim

- In August, 2012, the Department of Health (DOH) in Taiwan has offered DOH affiliated regional hospitals free access to the Cochrane Library.
- To investigate the acceptance of and intention in applying the Cochrane Library among health professionals

# Methods

- A structured questionnaire was designed
- Domain factors including
  - perceived ease of use (EOU)
  - perceived usefulness (PU)
  - attitude toward to using (ATT)
  - intention to use (ITU)
  - informational richness (IR)
- Demographic factors including:
  - age
  - sex
  - professional specialty
  - education
  - clinical experience
  - position
  - previous EBM training

# Methods (cont.)

- Content validity
  - Expert panel
- Reliability
  - Cronbach's Alpha: 0.952
- Survey period
  - Mid-Dec, 2012 to Mid-July, 2013
- Survey target
  - Health professionals in regional hospitals

# Demographic characteristics of respondents

Characteristic	Category	n	%
Gender	male	82	27.0
	female	222	73.0
Age (years)	< 30	88	28.9
	31-40	123	40.5
	41-50	72	23.7
	≥ 51	16	5.3
Clinical experience	<5 years	97	31.9
	6-10 years	68	22.4
	11-15 years	61	20.1
	>16 years	72	23.7
Professional specialty	physicians	54	17.8
	nurses	121	39.8
	pharmacists	55	18.1
	others	74	24.3
Administrative position	with	78	25.7
	without	223	73.4
Teaching responsibility	yes	160	52.6
	no	141	42.4
Academic degree	Bachelor	143	47.0
	Master & PhD	91	29.9
	Others	70	23.1

# Regression path analysis

Path analysis	adjR <sup>2</sup>	F-test	<i>p</i>
PU, ATT, IR & EOU to ITU	.737	F <sub>(4,299)</sub> =212.864	.000
PU & EOU to ATT	.740	F <sub>(2,301)</sub> =431.508	.000
IR & EOU to PU	.620	F <sub>(2,301)</sub> =248.173	.000
IR to EOU	.168	F <sub>(1,302)</sub> =63.325	.000

**PU: perceived usefulness**

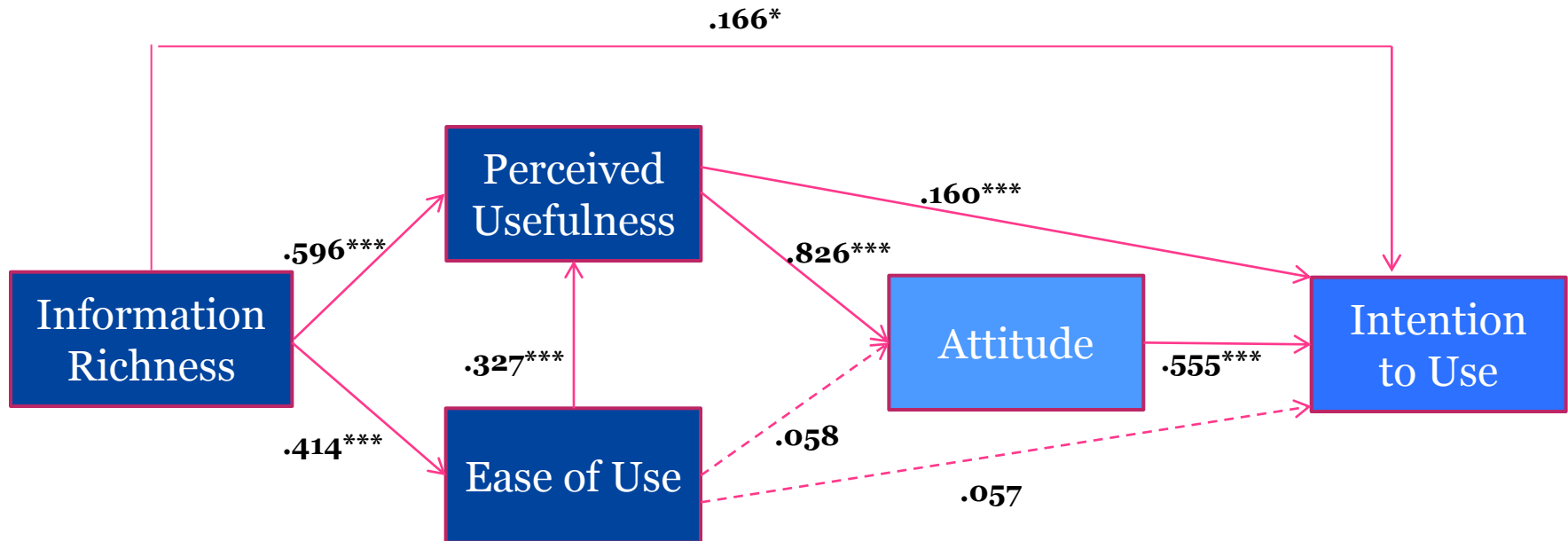
**ATT: attitude toward to using**

**IR: informational richness**

**EOU: perceived ease of use**

**ITU: intention to use**

# Result of model test



## Mean score of TAM domains

	N	Mean	SD
Information Richness	304	3.95	.55
Ease of Use	304	3.71	.64
Perceived Usefulness	304	3.92	.57
Attitude	304	3.93	.59
Intention to Use	304	4.02	.60



# Limitations

- The study only recruited a limited number of subjects, increasing sample size is needed in future study.
- For this anonymous survey, there is limit of exploring few baseline characteristics.
- Intention to use does not represent the actual behavior in using electronic EBM resource.

# Conclusions

- Perceived usefulness (PU) is the determinant factor to influence user attitude toward EBM electronic database.
- User attitude, PU and information richness (IR) together affect users' intention to use resource.
- IR significantly influences PU and perceived ease of use (EOU), IR and EOU play important roles in enhancing the value of electronic database.

# Conclusions

- This study identified apparent priorities, such as PU for promoting electronic evidence-based resource in clinical setting, which can be further enhanced by EOU & IR.
- Future research should focus on enhancing the usability of the Cochrane Library via effective action strategies.

**3<sup>rd</sup> International Society for  
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# WELCOME TO TAIWAN

## Important dates

Abstract submission from 15 Feb, 2014  
Very early registration by 31 March, 2014  
early registration by 30 June, 2014

*Taipei, Taiwan  
November 6-9, 2014*

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