

科技部補助專題研究計畫成果報告 期末報告

駕駛性別差異、自我意識與偏差駕駛行為(A01)

計畫類別：個別型計畫
計畫編號：MOST 103-2629-E-006-001-
執行期間：103年08月01日至104年07月31日
執行單位：國立成功大學交通管理科學系（所）

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報告附件：出席國際會議研究心得報告及發表論文

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中華民國 104 年 10 月 24 日

中文摘要：本計畫調查職業駕駛的性別、自我意識、與兩者之交互作用是否影響其偏差駕駛行為。採用問卷分析台灣331位公共運輸工具駕駛人，直接詢問此331位駕駛人，請他們填答自我意識與駕駛行為。接著使用結構方程模式探索構面間的因果關係。結果顯示女性職業駕駛呈現出較男性更高的自我意識、但較低度的偏差駕駛行為。性別與自我意識都是偏差駕駛行為的良好解釋因子。模型揭露職業駕駛的自我意識認知對偏差駕駛行為的影響，受到性別因子的調節，此交互作用在女性駕駛族群中更為強烈。本計畫的結果可提供公共運輸營運商的人力資源管理在雇用潛在駕駛時，應考量職業駕駛的人格特質。研究現亦可連結職業的選擇與人格因子，可影響工作的適配度。

中文關鍵詞：性別差異、自我意識、偏差駕駛行為

英文摘要：The project investigated how professional drivers' gender interacted with self-consciousness to influence their aberrant driving behaviors. Questionnaires were utilized to survey Taiwanese public transport drivers whose working environment directly interacting with passengers. 331 study participants were approached and reported their level of self-consciousness and driving behaviors. The structural equation modeling was adopted to explore the causal relationship among the constructs and the results revealed that female professional drivers reported higher self-consciousness and less aberrant driving behaviors than male participants. Both gender and self-consciousness explain professional drivers' aberrant driving behaviors. The models suggested that the effects of self-consciousness on self-reported aberrant driving behaviors were moderated by driver gender. Professional drivers' perceptions of self-consciousness influence their aberrant driving behaviors more strongly for female than male. The results of project provide human resource managers of public transport providers with reliable information regarding at what personality traits they should take into account before hiring prospective drivers. Study findings may also link occupational choice to personality factors that influence person-job fit.

英文關鍵詞：gender differences; self-consciousness; aberrant driving behavior.

科技部補助專題研究計畫成果報告

(■期末報告)

駕駛性別差異、自我意識與偏差駕駛行為(A01)

計畫類別：個別型計畫 整合型計畫

計畫編號：MOST 103— 2629 — E — 006 —001

執行期間：103年08月01日至104年07月31日

執行機構及系所：國立成功大學交通管理科學系

計畫主持人：林珮琿

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本計畫除繳交成果報告外，另含下列出國報告，共 1 份：

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中 華 民 國 104 年 10 月 21 日

行政院科技部專題研究計畫成果報告

駕駛性別差異、自我意識與偏差駕駛行為(A01)

Improvement

計畫編號：MOST 103-2629-E-006-001

執行期限：103年8月1日至104年7月31日

主持人：林珮琚 國立成功大學交通管理學系

一、中文摘要

本計畫調查職業駕駛的性別、自我意識、與兩者之交互作用是否影響其偏差駕駛行為。採用問卷分析台灣331位公共運輸工具駕駛人，直接詢問此331位駕駛人，請他們填答自我意識與駕駛行為。接著使用結構方程模式探索構面間的因果關係。結果顯示女性職業駕駛呈現出較男性更高的自我意識、但較低度的偏差駕駛行為。性別與自我意識都是偏差駕駛行為的良好解釋因子。模型揭露職業駕駛的自我意識認知對偏差駕駛行為的影響，受到性別因子的調節，此交互作用在女性駕駛族群中更為強烈。本計畫的結果可提供公共運輸營運商的人力資源管理在雇用潛在駕駛時，應考量職業駕駛的人格特質。研究現亦可連結職業的選擇與人格因子，可影響工作的適配度。

關鍵詞：性別差異、自我意識、偏差駕駛行為

Abstract

The project investigated how professional drivers' gender interacted with self-consciousness to influence their aberrant driving behaviors. Questionnaires were utilized to survey Taiwanese public transport drivers whose working environment directly interacting with passengers. 331 study participants were approached and reported their level of self-consciousness and driving behaviors. The structural equation modeling was adopted to explore the causal relationship among the constructs and the results revealed that female professional drivers reported higher self-consciousness and less aberrant driving behaviors than male participants. Both gender and self-consciousness explain professional drivers' aberrant driving behaviors. The models suggested that the effects of self-consciousness on self-reported aberrant driving behaviors were moderated by driver gender. Professional drivers' perceptions of self-consciousness influence their aberrant driving behaviors more strongly for female than male. The results of project provide human resource managers of public transport providers with reliable information regarding at what personality traits they should take into account before hiring prospective drivers. Study findings may also link occupational choice to personality factors that influence person-job fit.

Keywords: gender differences; self-consciousness; aberrant driving behavior.

二、緣由與目的

Driving is a situation providing people with more opportunity to be exposed to high levels of provocation. There is evidence connecting driving behavior with demographic factors, such as gender and age, with personality factors, such as sensation seeking and aggression (Rosenbloom & Shahar, 2007). Some peoples' behavior changes when they find themselves behind the steering wheel. In other words, some people act aggressively when driving but are not aggressive during other daily life activities (Jovanovic et al., 2011). Driving situation may increase feelings of invulnerability and personal power. These feelings might make people more likely to act aggressively when they become angry (Fineran & Bolen, 2006). Aggressive driving, an increasingly frequent form of behavior during driving, is considered to be an important problem in almost all countries (Jovanovic et al., 2011). Recent research indicates that a growing number of motorists are being exposed to aggressive, violent and/or reckless behaviors on public roads (Jeremy et al., 2007). Angry, aggressive drivers are a significant psychological and health hazard on the road (Deffenbacher et al., 2003).

Driving performance is affected by various factors, which together determine its level of safety or risk. Aspects of both driving skill and driving style appear to contribute to crash risk. Of the latter, faster driving speed and willingness to commit driving violations increase crash risk and these factors may be explicable in terms of personality and antisocial motivation (Elander et al., 1993). Aggressive driving is defined in terms of the frustration–aggression model. In that context aggressive driving is a syndrome of frustration-driven behaviors, enabled by the driver's environment (Shinar, 1998). A considerable body of research is presently focusing on identifying the causes of aggressive and violent driving behaviors and the subsequent impact these behaviors have on road safety (Jeremy et al., 2007). One of the often used instruments for measuring driving style is the Driver Behavior Questionnaire (DBQ) (Reason et al., 1990). The DBQ first focused on two distinct behaviors that were named errors and violations. Errors consist of actions that are not planned while violations were considered to be deliberate deviations from safe driving practices. An additional factor named “slips and lapses” was also identified that focuses on attention and memory failures, which were not considered to effect driving safety. For example, lapses may reflect behaviors associated with memory and attention problems, while errors include more serious mistakes such as failures of observation and misjudgments (Lajunen & Summala, 1995).

Professional drivers, i.e., people whose job is driving, are at a high risk of road traffic accidents worldwide (Öz, Özkan & Lajunen, 2010). When compared to the general driving population, professional drivers are at an increased risk of crash involvement (Öz, Özkan, & Lajunen, 2013; Sullman, Meadows & Pajo, 2002). There are many reasons why driving a car may be a stressful activity. Being in a hurry, impatience, traffic congestion, competing with

other drivers, feelings of inferiority, and the wrong actions of other drivers are some of the sources of frustration and stress in traffic (Jovanovic et al., 2011). Stress experienced in the workplace originating from a perceived disparity in extrinsic efforts and rewards was associated with increased enduring feelings of anger in employees, and through this anger an elevated level of aggressive feelings on the road (McLinton & Dollard, 2010). Most drivers are attempting to arrive quickly at a destination. Road conditions and the behavior of other motorists often prevent or block drivers from attaining this goal. This type of blocked behavior often results in feelings of frustration that produce anger (Millar, 2007). The person's propensity to anger when driving and the kinds of situations encountered on the road certainly influence emotional and behavioral reactions (Deffenbacher et al., 2003).

The ABC Theory of Emotion represents a widely-accepted model of how one's feelings and behavioral patterns are created (Ellis, 1991). A stands for Activating events in people's lives; these events represent what happens, such as other motorists' blocking. B stands for people's conscious or subconscious Beliefs about these events and their meaning, such as the blocking is intended. C stands for emotional and behavioral Consequences or Concomitants of their beliefs; they represent the feelings and behavioral patterns (Conduct) these people have as a result, such as frustration that produce anger. It asserts that the emotions people experience such as, for example, frustration or anxiety, and resulting behavior, do not come directly from the events in our lives, but from the interpretations people make of those events, i.e. from conscious or subconscious beliefs people bring to that situation. The central proposition of the theory is that the emotional and behavioral consequence (C) is not caused by the Activating event (A) directly, but by interpretation or belief (B) one has of the meaning of the activating event.

Individuals may have different dispositional tendencies to self-awareness which has been conceptualized as self-consciousness. Self-awareness theory is based on the assumption that conscious awareness can be directed either toward the self as an object of scrutiny (objective self-awareness) or toward the external environment (subjective self-awareness) (Duval & Wicklund, 1972). Fenigstein, Scheier & Buss (1975) developed a scale to assess individual differences in self-consciousness and yielded three factors: private self-consciousness, public self-consciousness, and social anxiety. Private self-consciousness consists of attending to one's thoughts, feelings, and motives. Social anxiety is the fear of interaction with other people that brings on self-consciousness, feelings of being negatively judged and evaluated, and, as a result, leads to avoidance. Public self-consciousness and social anxiety may reflect that persistent nature of an individual's response to the need for dealing with social implications, and for social impression management. People high in public self-consciousness are motivated to maintain a positive public image and to adhere to societal norms prohibiting aggressive behavior. Consequently, people high in public self-consciousness might be less likely to act aggressively even when they are experiencing anger. Alternatively, people low in public self-consciousness

who are less concerned about public presentation might be more likely to act aggressively when angered. It was expected that when people were angry, less aggressive driving behavior would occur when they were high in public self-consciousness than when they were low in public self-consciousness (Millar, 2007). Although Millar (2007) highlights the complex relationship between personality, emotion, and behavior, the study lacks of gender effects.

Previous studies have shown that many factors play an important role in predicting traffic accidents, such as gender, age, driving skills and styles, personality traits, and motivational factors (Lajunen & Summala, 1995; Reason et al., 1990). The best predictors of future motor vehicle accidents were younger age, high hostility in combination with poor self-esteem, residence in a larger city, recent relocation, high job stress, prior motor vehicle accidents, and self-reported tendencies to speed and disregard traffic rules (Norris et al., 2000). ‘Masculinity’ may be hazardous to health. The first high-risk group consisted of mostly men, characterized by low levels of altruism and anxiety, and high levels of sensation-seeking, irresponsibility, and driving related aggression (Pal, 2002). Gender role socialization and the association of masculinity with risk-taking behavior, acceptance of risk and a disregard of pain and injury may be factors leading to the hazardous actions on the part of men. These include, for example, excessive consumption of alcohol, drug use, aggressive behavior, to be in control of situations, and risky driving (WHO, 2002). Young male novice drivers are overrepresented in injury motor-vehicle crashes compared to females in the same category (Nyberg & Gregersen, 2007). Men have double the number of crashes (per 1,000 drivers) than women (Chipman et al., 1992). In the UK 40% of male drivers could be classed as ‘high violators’, compared with 20% of female drivers. Violations included such behaviors as crossing lights on red, driving close to the vehicle in front, driving over the legal limit for blood alcohol, being involved in unofficial races with other drivers (Parker & Malone, 2004). When presented with the statement ‘I disregard the speed limits late at night or very early in the morning’, 22% of male drivers agreed with the statement, compared with only 8% of females (The Social Issues Research Centre, 2004). Men are more likely than women to be involved in crashes that occur on bends, in the dark or those that involve overtaking.

Women, on the other hand, have a greater frequency of crashes occurring at junctions than men (Waylen & McKenna, 2002). Females had a stronger sense of obligation to obey traffic laws. They were also more likely to evaluate traffic laws positively. The observed gender differences were particularly pronounced among young drivers. Women were more likely than men to view the content of traffic laws as important, clear and reasonable. This resulted in a stronger sense of obligation to obey traffic laws (Yagil, 1998). Baker et al. (2003) indicated that senior women are primarily overrepresented in crashes that occur under the “safest” conditions, in daylight, when traffic is low (not at rush hour), when the weather is good, and when the roads are dry. Table 1 summarizes the above literature on gender differences.

Table 1. A summary of gender differences in driver behaviors

Gender	Driver Behaviors
Males	<ol style="list-style-type: none"> 1. Sensation-seeking and risk-taking (The Social Issues Research Centre, 2004). 2. Speeding and violation on traffic laws (Kirkwood, 1996). 3. Ignore road signs frequently (Forsyth, 1992). 4. Novice drivers are overrepresented in injury crashes (Engström et al., 2003; Kweon & Kockelman, 2003; Nyberg & Gregersen, 2007). 5. Be involved in crashes that occur on bends, in the dark or those that involve overtaking (Waylen & McKenna, 2002).
Females	<ol style="list-style-type: none"> 1. A stronger sense of obligation to obey traffic laws and more likely to view the content of traffic laws as important, clear and reasonable (Yagli, 1988). 2. Overrepresented in crashes that occur under the “safest” conditions, in daylight when traffic is low, when weather is good, and when roads are dry (Baker et al., 2003). 3. Have a greater frequency of crashes occurring at junctions (Waylen & McKenna, 2002).

The project focuses on professional drivers’ unique working environment which is not only exposed to the on-road behavior for long periods of time but also full of passengers mostly unknown, thus the vehicle is hard to be taken as an extension of drivers personal space (Deffenbacher et al., 2003) and passengers may become a source of distraction and a risk-promoting factor (Chen et al., 2000). The project examines the effect of self-consciousness on driver-passenger social interactions in a closed space for public transport service using self-report methods. Based on the ABC theory of emotion, the aim of the present study, therefore, was to investigate the differences among professional driver groups (e.g., female and male; taxi and bus) in terms of social anxiety and accident involvement, and to examine the relationships

between professional drivers' self-consciousness and their aberrant driving behaviors. Specifically, this study investigated how the interaction between gender and public self-consciousness influenced aberrant behavior while driving. The primary research questions addressed in this study were as follows:

- Will professional drivers' self-consciousness explain their aberrant driving behaviors?
- Will gender of professional drivers interferes the strength of the self-consciousness and predict their driving aberrant behaviors?

三、 Research Method

Figure 1 depicts the conceptual model that was adopted to investigate the causal relationship among gender difference, self-consciousness, and aberrant driving behaviors for public transport drivers. Three constructs were used as self-consciousness indicators: private self-consciousness, public self-consciousness, and social anxiety. The first hypothesis tested the relationship between private self-consciousness and aberrant driving behaviors. Private self-consciousness was postulated to affect the aberrant driving behaviors of public transport drivers. Accordingly, the following hypothesis was proposed:

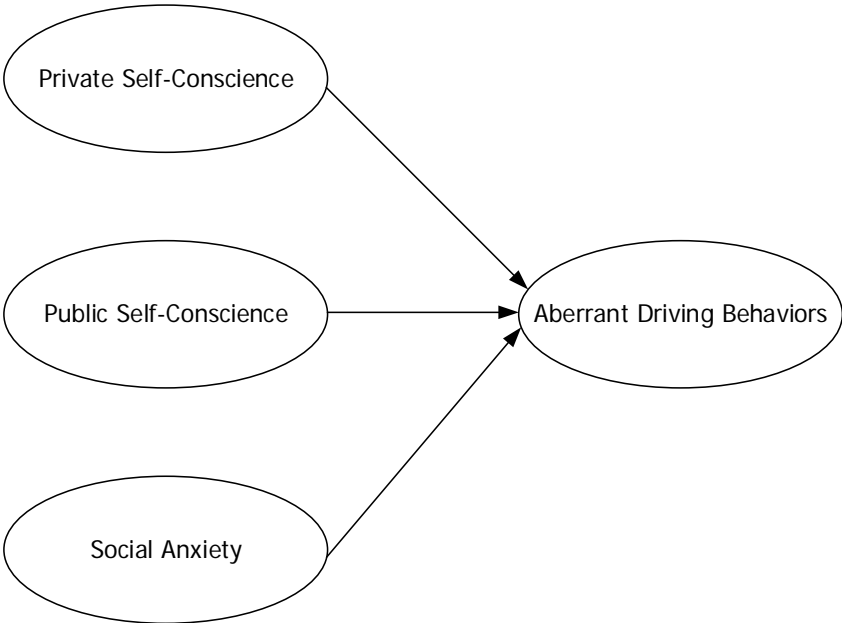


Figure 1. The research framework

H1. The private self-consciousness of public transport drivers significantly affects their aberrant driving behaviors.

The second hypothesis tested the relationship between public self-consciousness and aberrant driving behaviors. Public self-consciousness was postulated to affect the aberrant driving

behaviors of public transport drivers. Accordingly, the second hypothesis was proposed as follows:

H2. The public self-consciousness of public transport drivers significantly affects their aberrant driving behaviors.

If public transport drivers with more social anxiety, then they are more likely to engender aberrant driving behaviors. Thus, the following hypothesis was proposed:

H3. Social anxiety is important in predicting aberrant driving behaviors. Social anxiety positively affects the aberrant driving behaviors of public transport drivers.

This study hypothesized that self-consciousness of public transport drivers influences their aberrant driving behaviors and does vary according to the gender and driving professions. Hypotheses 4 and 5 below were thus proposed.

H4. Gender differences moderates the relationship between professional drivers' self-consciousness and aberrant driving behavior

H5. Driving professions moderates the relationship between professional drivers' self-consciousness and aberrant driving behavior

The questionnaire (SCS and DBQ) was distributed from December, 2013, to April, 2014, to survey a chosen sample of Taiwanese public transport professional drivers whose working environment directly interacting with passengers. As shown in Table 2, of the sample of 331 questionnaires, 232 were valid, yielding a response rate of 70%. 78 percent of the respondents are bus drivers, and the remaining 22 percent are taxi drivers. Less sample size for taxi drivers because they were approached while waiting in line for their turn to pick up passengers and had to leave the questionnaire unfinished and invalid. Among the 232 subjects, all age levels were evenly represented. Less than one-third of participants (31%) had experience in accident involvement in three years.

Table 2. Participants' profile

Variable		Sample size	Frequency distribution
Gender	male	206	89%
	female	26	11%
Profession	bus	181	78%

	taxi driver	51	22%
Age	less than 25	3	1.3%
	25-40	95	40.9%
	41-55	105	45.3%
	more than 55	29	12.5%
	elementary school	1	0.4%
Education	junior high	32	13.8%
	senior high	129	55.6%
	undergraduate	68	29.3%
	postgraduate	2	0.9%
	less than 5 years	29	12.5%
Driving experience	5-10 years	40	17.2%
	11-15 years	43	18.5%
	16-20 years	41	17.7%
	more than 20 years	79	34.1%
	less than 5 years	90	38.8%
Being a professional driver	5-10 years	46	19.8%
	11-15 years	38	16.4%
	16-20 years	26	11.2%
Crash involvement in three years	more than 20 years	32	13.8%
	Yes	72	31%
	No	160	69%

四、Hypothesis Testing

Structural Equation Modelling was utilized to examine the model and evaluate its goodness of fit. The modification indices recommended by AMOS 22 were adopted, and the standardized

residuals were verified. Figure 2 summarizes the model specification and fitness measures. The path coefficients for the three measurement subsystems were all above 0.7. The χ^2 value indicates that the model fitted the collected data ($\chi^2 = 13.407$, p-value = 0.340 > 0.05, and $\chi^2 / \text{degree-of-freedom} = 1.117$). The GFI (Goodness-of-Fit Index, Jöreskog and Sörbom, 1989) and AGFI (Adjusted Goodness-of-Fit Index) values were 0.986 and 0.957, respectively also indicating a good fit. Further, the RMR (Root Mean square Residual) value of 0.015 was within the acceptable level.

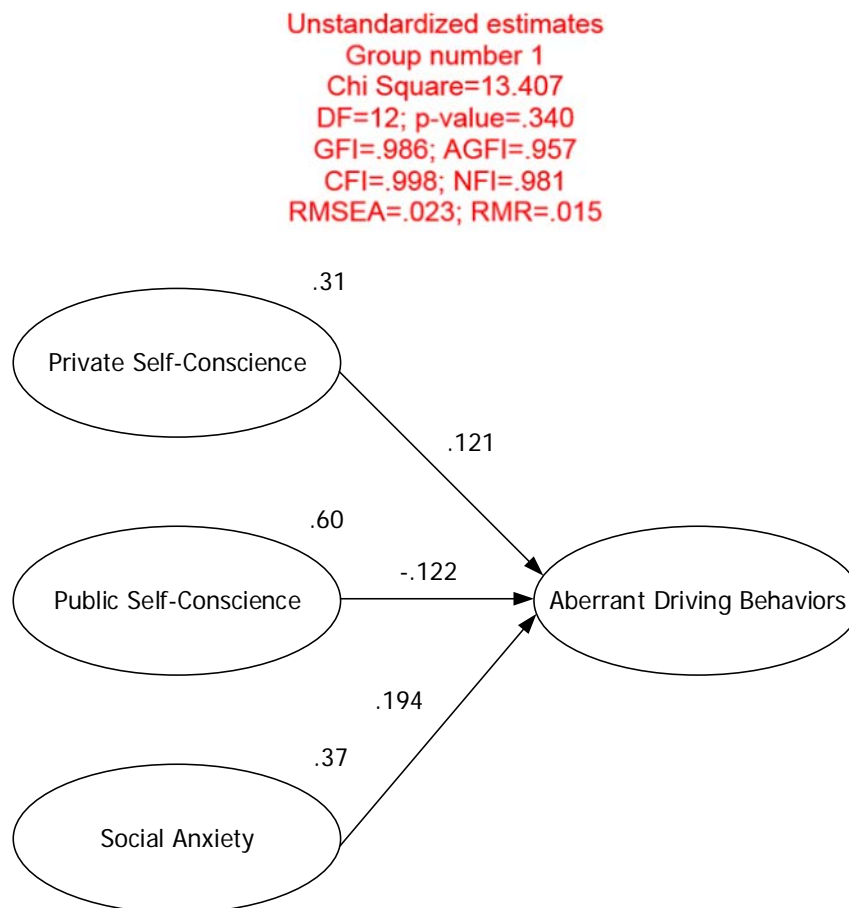


Table 3 shows the estimated parameters and the corresponding t-values of the conceptual model. The direct path {Private self-consciousness → Aberrant driving behaviors} was insignificant, since the regression coefficient was 0.121 with $t = 1.418$ and $p\text{-value} = 0.171$. Therefore, hypothesis H1 was not supported, suggesting that the private self-consciousness of public transport drivers insignificantly affects their aberrant driving behaviors. The path {Public self-consciousness → Aberrant driving behaviors} had an significant direct effect on aberrant driving behaviors. Therefore, hypothesis H2 was supported, which indicated that the public self-consciousness of public transport drivers significantly affects their aberrant driving behaviors. The third hypothesis H3 was accepted, because the direct path {Social anxiety → Aberrant driving behaviors} was significant, having a regression parameter of 0.194 with $t = 2.618$, and

p-value < 0.001. The results indicated that social anxiety positively affects the aberrant driving behaviors of public transport drivers and social anxiety is important in predicting aberrant driving behaviors.

Table 3. Unstandardized direct effect on constructs

Hypothesis	Path	Direct effect (t-value)
H ₁	Private self-conscience → Aberrant driving behaviors	0.121(1.418)
H ₂	Public self-conscience → Aberrant driving behaviors	-0.122* (-2.147)
H ₃	Social anxiety → Aberrant driving behaviors	0.194** (2.618)

*p-value<0.05 **p-value<0.01

[Section content omitted here]

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五、成果自評

本研究結果與計畫書相符，由於本專題計畫補助的經費補助，計畫內容已執行完成，並獲致完整結果，正在潤飾稿件當中，將於英文編修完成後，投稿至刊登主題相符之期刊：Transportation Research Part F-Traffic Psychology and Behaviour，故本結案報告僅

節錄部分內容未揭露所有成果。

科技部補助專題研究計畫出席國際學術會議心得報告

日期：2014 年 11 月 30 日

計畫編號	MOST 103-2629-E-006-001		
計畫名稱	駕駛性別差異、自我意識與偏差駕駛行為(A01)		
出國人員姓名	林珮琿	服務機構及職稱	國立成功大學交通管理系教授
會議時間	2014 年 11 月 20 日 至 2014 年 11 月 23 日	會議地點	日本大阪
會議名稱	(中文) 第五屆商業與公共政策亞洲研討會 (英文) The Fifth Asian Conference on Business and Public Policy		
發表題目	(中文)探索便利商店於都會區高密度展店策略-以改制前台南市 7-11 超商為例 (英文) Exploring the High-Density Development Strategy of Convenience Stores in Urban Area: A Case Study of 7-11 In Taiwan		

一、參加會議經過

本學術會議為期四天，主辦單位 IAFOR，該組織全名為國際學術論壇 (the International Academic Forum)，總部設於日本名古屋，以非營利組織一般社團法人立案，定位為亞洲的獨立智庫，致力於瞭解當代亞太地區與區域地理、公共政策、商管變遷的議題。2014/11/20 星期四首先登場的是研討會的歡迎接待與及註冊報到，傍晚於大阪麗嘉皇家酒店 (Rihga Royal Hotels) 大廳集合，11/21 日全日進行的是大會安排的專題演講、展示、平行的分場會議與海報、以及晚宴。11/22 日開始，部分會議場地使用相鄰的大阪府立國際會議中心 (大阪府立國際會議場，OICC) (入口、與分場會議地點如下圖)。



主辦單位 IAFOR 為求規模經濟，依循 2013 年慣例，採取的是兩組研討會合辦的形式，因此「第五屆商業與公共政策亞洲研討會」ACBPP 同時與另一場「The Second Annual Asian Conference on Technology, Information and Society, ACTIS」研討會同步進行，有共同的表演與交誼活動，150 位與會人員來自 30 個國家，大會主席仍是美國亞利桑納州立大學 Jerry Platt 教授，副主席為美國亞利桑納州立大學的 Barry Bozeman 教授，2014 大會安排了數個主講者，包括 Barry Bozeman 教授、經濟學人情報網（Economist Corporate Network）日本中心主任 Andrew Staples 博士討論日本的大趨勢與未來的創新挑戰、Joel R. Campbell 教授討論自民黨主席安倍晉三的民族主義與三項經濟方針，穿插與會者體驗書法活動（如下圖）。後學被安排口頭報告場次於 11/22 日，個人報告獲得來自亞洲其它國家學者的提問交流，與正面的評價與肯定，會後並接獲主辦單位邀稿，希望後學本次所發表之論文全文投稿至研討會合作的學術期刊。



二、與會心得

後學於2013年在科技部經費挹注下參加了由IAFOR舉辦的「第四屆亞洲商管研討會」，主辦單位安排一場由Jerry Platt教授主講的工作坊—「Data Science for Luddites」令後學印象至為深刻、獲益匪淺。工作坊主題選定介紹以R軟體處理巨量資料。在會議三週前，主辦單位持續向報名註冊的人員，通知工作坊訊息，欲參加人員應事先下載、安裝的檔案，有問題則利用線上方式先行詢答，做好準備工作。後學於三小時的課程當中，有如醍醐灌頂，可惜的是與會的大部分人員在課程中一直跟不上進度，Jerry Platt教授只好將速度減緩，導致所設計的第三、第四部分內容無法說明，至為可惜。因此再度報名2014年IAFOR舉辦的「第五屆商業與公共政策亞洲研討會」，企盼能繼續參與研討會的特色課程，向先進學習。可惜事與願違，雖然研討會延續了前一年的風格，但並未安排類似的工作坊，是參與本次會議甚為抱憾之處。

三、發表論文全文或摘要

To ensure there are no shortages in small-area stores when provisioning various commodities, chain convenience stores have introduced innovative logistics alternation, which breaks out the traditional full-truck delivery and increases delivery frequencies. This is opposite to the traditional way of high frequency, multiple items and small quantities. This proposal is to explore the logistics cost benefit of the economic scale caused by high-density store deployment. Based on an analysis of 7-ELEVEN, the leading actor of chain convenience stores in Taiwan, this proposal will build an econometric model and conduct an empirical study of 7-ELEVEN. This model may be an applicable reference for future strategy development in other distribution industries. The main feature of this research will be to construct an empirical model that estimates the functional relationship between the strategy of high-density deployment and profit/revenue. The study will explore the effectiveness of newly established stores according to a gravity model and analyze whether there is a limitation for the high-density deployment strategy in the future chain convenience store market. Necessary factors will be incorporated in the econometric model to comply with the development of the channel industry of chain convenience stores in Taiwan. In the analysis of the spatial competition caused by high-density deployment, this study will take into consideration the logistic cost benefit resulting from the economy of scale from high-density deployment. The rationality of the econometric model will

be verified by empirical data from 7-ELEVEN. On the premise of utilizing a high density deployment strategy by convenience stores, this study will determine the potential restrictions that those enterprises might come across and will convert them into the constructs and parameters of the model. A gravity model will be utilized to construct the econometric model that is sufficient to explain the utility of newly established stores and customers' consumption probability. Spatial competition, substitution and agglomeration effects among convenient stores will be incorporated in the model to explain the effects of these parameters on the current high density deployment strategy. The historical data of President Chain Store Corporation will be used to verify the model and demonstrate its usefulness. The results generated from the model will be used to figure out the restrictions that 7-ELEVEN might face by applying the high density deployment strategy.

四、建議

非常感謝科技部所提供之補助，使後學得以出席本次學術會議，從中獲得與其他國內、外學者討論的機會，深感不虛此行，若能持續積極補助、鼓勵研究人員或學者參與國際研討會，營造研究人員更佳的研究環境，並與國際學術交流、接軌，作專業上交流，必能提升研究水準與國際能見度。根據全球最具權威之國際會議組織「國際會議協會（International Congress and Convention Association, ICCA）」於荷蘭總部公布 2014 年全球國際會議場次排名，台灣以舉辦 145 場次之國際會議躋身亞洲第 4 大會議國，並創下歷年會議場次最高紀錄。由於會展產業所帶來的周邊經濟效益約為直接收益的 7 至 10 倍，推動會展產業可為舉辦國家及城市帶來可觀的經濟效益，會展經濟(Exhibition Economy)受到各國重視且成長快速。台灣經濟發展正面臨成長瓶頸，而台灣擁有多元文化、民主政治的社會氛圍，這是我們具備的優勢，也有人才與條件辦理品質相當的國際學術研討會，或仿照日本經驗，延攬歐美教授任客座學者，IAFOR 大會經常性組織的學者來自歐美日等世界各大學，可在舉辦國際研討會活動時產生莫大的助力。

五、攜回資料名稱及內容

大會議程。

六、其他

無。

科技部補助計畫衍生研發成果推廣資料表

日期:2015/09/08

科技部補助計畫	計畫名稱: 駕駛性別差異、自我意識與偏差駕駛行為(A01)
	計畫主持人: 林珮琄
	計畫編號: 103-2629-E-006-001- 學門領域: 性別主流科技計畫
無研發成果推廣資料	

103年度專題研究計畫研究成果彙整表

計畫主持人：林珮琚		計畫編號：103-2629-E-006-001-				計畫名稱：駕駛性別差異、自我意識與偏差駕駛行為(A01)	
成果項目		量化			單位	備註（質化說明： 如數個計畫共同成果、成果列為該期刊之封面故事...等）	
		實際已達成數（被接受或已發表）	預期總達成數（含實際已達成數）	本計畫實際貢獻百分比			
國內	論文著作	期刊論文	0	0	100%	篇	
		研究報告/技術報告	0	0	100%		
		研討會論文	0	0	100%		
		專書	0	0	100%	章/本	
	專利	申請中件數	0	0	100%	件	
		已獲得件數	0	0	100%		
	技術移轉	件數	0	0	100%	件	
		權利金	0	0	100%	千元	
	參與計畫人力（本國籍）	碩士生	2	2	100%	人次	
		博士生	0	0	100%		
		博士後研究員	0	0	100%		
		專任助理	0	0	100%		
國外	論文著作	期刊論文	0	1	100%	篇	
		研究報告/技術報告	0	0	100%		
		研討會論文	0	0	100%		
		專書	0	0	100%	章/本	
	專利	申請中件數	0	0	100%	件	
		已獲得件數	0	0	100%		
	技術移轉	件數	0	0	100%	件	
		權利金	0	0	100%	千元	
	參與計畫人力（外國籍）	碩士生	0	0	100%	人次	
		博士生	0	0	100%		
		博士後研究員	0	0	100%		
		專任助理	0	0	100%		
其他成果 （無法以量化表達之 成果如辦理學術活動 、獲得獎項、重要國 際合作、研究成果國 際影響力及其他協助 產業技術發展之具體 效益事項等，請以文 字敘述填列。）		無					

	成果項目	量化	名稱或內容性質簡述
科教處計畫加填項目	測驗工具(含質性與量性)	0	
	課程/模組	0	
	電腦及網路系統或工具	0	
	教材	0	
	舉辦之活動/競賽	0	
	研討會/工作坊	0	
	電子報、網站	0	
	計畫成果推廣之參與(閱聽)人數	0	

科技部補助專題研究計畫成果報告自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現或其他有關價值等，作一綜合評估。

1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

達成目標

未達成目標（請說明，以100字為限）

實驗失敗

因故實驗中斷

其他原因

說明：

2. 研究成果在學術期刊發表或申請專利等情形：

論文： 已發表 未發表之文稿 撰寫中 無

專利： 已獲得 申請中 無

技轉： 已技轉 洽談中 無

其他：（以100字為限）

3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）（以500字為限）

駕駛是一種人們暴露於高度挑釁的情境，個性差異與個人特性會影響駕駛時產生憤怒的經驗。個人的侵略傾向反映在駕駛行為上，職業駕駛長時間身處道路進行駕駛行為，不只危險也充滿壓力，職業車輛駕駛在道路上發生意外的風險，比一般非職業駕駛來的高。由於工作壓力與偏差駕駛行為有正向相關關係，因此駕駛研究已將焦點由駕駛技術、駕駛行為與意外事故間關係轉移至由心理機制所對應的駕駛績效差異，由心理層面瞭解駕駛的差異。本計畫結合性別、偏差駕駛行為與自我意識，針對不同性別所具備的駕駛能力，探討性別差異是否可能預測偏差駕駛行為。計畫研擬初期，民間性別平等專家學者進行程序參與時認為本計畫涉及就業、經濟、人身安全、環境領域。本計畫經由建立偏差駕駛行為與駕駛人社經背景之關聯性，提供主管機關參考，作為教育訓練的改善依據，有效減少駕駛人用路時的偏差駕駛行為。藉由瞭解職業駕駛自我意識的差異，經營管理者可以有效改善職業駕駛的偏差駕駛行為，並提供管理單位對多元性別駕駛的聘任考量與稽核，提升營業車輛之服務水準。