

行政院國家科學委員會專題研究計畫成果報告

人格五因素與銷售績效之關連性

—以壽險業為例

Relations Between Five Factors of Personality and Sales Performance—Life Insurance as an Example

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一、中文摘要

本研究運用 Costa & McCrae(1992)所發展之人格五因素量表，針對保險業務員施測，探討業務員銷售績效與其人格特質之關係。問卷共發出 320 份，回收合計得有效問卷 214 份。研究結果顯示，業務員的客觀銷售績效與其人格特質中的嚴謹性 (Conscientiousness) 呈現顯著正相關 ($p < 0.01$)，而與另外其它四個人格因素無顯著關係。就人格次維度 (細刻面) 而言，主見 (Assertiveness)、活躍力 (Activity)、情感 (Feelings)、勝任能力 (Competence)、忠實 (Dutifulness)、成就驅力 (Achievement Striving)、自律 (Self-Discipline) 與銷售績效呈現顯著正相關；脆弱 (Vulnerability)、謹慎 (Modesty) 則與銷售績效呈現顯著負相關。

關鍵詞：績效、銷售績效、人格、人格五因素、壽險業

Abstract

Using NEO personality inventory (NEO PI-R) developed by Costa & McCrae (1992), the purpose of this article was to investigate the relations between five factors of personality of salespeople and their sales performance in a life insurance company. There were totally 214 valid samples received among 320 respondents.

The result shows positive significant relation between Conscientiousness and objective sales performance ($p < 0.01$). The other four personality factors did not show significant evidence. Sub-dimensions (facets) of personality construct include Assertiveness, Activity, Feelings, Competence, Dutifulness, Achievement Striving, Self-Discipline exhibit positive correlation with sales performance, and Vulnerability, Modesty show negative correlation with sales performance on the other hand.

Keywords: Performance, Sales Performance, Personality, Five Factors, Big Five, Life Insurance

二、緣由與目的

銷售工作的獨特性主要展現在二個方面：自主的程度 (degree of autonomy) (Churchill, Ford, & Walker, 1985) 和拒絕程度 (degree of rejection)。業務員的工作經常是遠離辦公室，在上司監督不到的地方進行銷售作業，所以業務工作的推展常需要仰賴自我的動機、主動性和說服力，其自主的程度顯然高於其它型態的工作。另一方面，銷售工作也常被以拒絕程度來彰顯其特殊性，相對於成功銷售，業務員常常遭遇更大比例的銷售失敗。

依據上述銷售工作的二種特性，因為高度的自主性，使人們傾向於將銷售的成敗，歸因於業務員本身；因為高度的挫折性，使人們認定業務員必需具備某種人格特質，才能從事這類工作。由於銷售工作涉及高度的人際互動，人格特質的某些層面突出與否，可能會影響銷售的表現。

想要尋找變數來預測業務員銷售績效的另一個理由是，業務員的績效產出差異很大。根據 Hunter(1990) 等學者的研究，員工產出的變異程度，隨著工作本身所要求的資訊處理需求 (複雜度) 之增加而遞增，例如：低複雜度的職業 (偏屬例行性工作)，其產出的標準差對平均產出的百分比為 19.3%；中複雜度的職業 (技術員、第一線監督、低階層行政) 為 31.8%；高複雜度的職業 (管理性、專業性、複雜技術性) 為 47.5%。而保險業務員，其產出的平均標準差最大，高達 120%，其它銷售性的工作 (非保險業務員)，亦落在高複雜組群中，平均標準差為 48%。如果一個產業內的個人產出變異非常大，那麼尋找一個優良的人員甄選方法，便顯得十分重要。既然業務員銷售績效的個別差異如此之大，只要在人員甄選上有所改善，其產出的增加也會相當顯著。

故本研究之目的在於：

1. 探討業務員人格特質五因素與銷售績效的關係。

2. 探討業務員人格五因素之次維度變數與銷售績效的關係。
3. 探討業務員其它個人變數與銷售績效的關係。

三、研究結果

(一) 樣本描述

本研究針對國內某外商壽險公司設立在台北市的 20 個營業單位中，隨機抽選三個單位進行問卷調查，調查是利用公司週會時間進行團體施測，並於當日回收，週會缺席者則由公司助理轉交問卷，並由研究者進行追蹤。每位填答問卷之業務員致贈電話卡一張，事後並寄送個人分析表一份。總計發出 320 份問卷，回收的 290 份問卷中剔除登錄未滿 6 個月者、無績效記錄者、問題答卷者，共回收有效問卷 214 份。

214 份有效樣本中，71%為女性，75%具備大專以上學歷，58%為已婚，89%為全時間投入並未兼職其他工作，9%曾經在其它保險公司任職，平均年齡 33.4 歲，平均年資 36.4 個月。

(二) 客觀績效

以業務員過去六個月之公司績效記錄為準，共有三個指標：總銷售金額(FYP)、總佣金收入(FYC)、總銷售契約件數(Cases)。為了兼顧三個指標之重要性，研究者並以上述三個指標的標準化分數加總，做為客觀總績效指標。六個月之樣本平均銷售金額 63.6(std.=48.9)萬元，平均佣金收入 21.7(std.=15.2)萬元，平均銷售契約件數 22.7(std.=15.4)件。

(三) 主觀績效

由業務員自評，以 3 個題目量測業務員總體績效的自我評鑑(Posdakoff & Mackenzie, 1994)。(附錄表一)

(四) 人格特質

業務員之人格特質量測，採用 NEO-PI 五因素人格量表(Costa & McCrae, 1992)。本量表共計 240 題，測量人格特質的五個主要構面(domains)及三十個細刻面(facets)(附錄表二)。五個主要構面分別為：神經質、外向性、開放性、友善性、嚴謹性，每個主要構面由六個細刻面加總而成，每個細刻面由八個題目量測加總而成。

依特徵值(eigenvalue)大於 1 的準則並參考陡坡圖(scree plot)，運用確證性因素分析萃取五個因素，累計解釋變異為 61%，結果如(附錄表二)，顯示 N、O、C 三個因素組型如原量表設計所預期；而 E、A 二個因素組型則略有出入。故研究者刪除因素負荷小於 0.4 的刻面變數，以餘留者做為主要構面之組成。

以係數做為信度指標，顯示除了 O6、A4、A6 三個細刻面變數之外，其餘皆高於 0.57，信度

皆在可接受範圍。(附錄表二)

(五) 組織公民行為

主要是量測業務員在組織內的三種組織公民行為(OCBs)，包括：扶助(Helping)由 7 個題目量測、德行(Civic Virtue)由 3 個題目量測、運動員精神(Sportsmanship)由 4 個題目量測(Posdakoff & Mackenzie, 1994)。(附錄表一)

(六) 變數相關分析

1. 客觀績效與預測變數

(1) 人格五因素(主構面)

嚴謹性與銷售額、佣金、件數、總績效指標之相關係數分別為：.18、.20、.22、.21，均達顯著水準。外向性與佣金、件數之相關係數分別為：.14、.14 均達到 0.05 顯著水準，惟獨與銷售額、總績效指標之相關性並不顯著。

人格五因素之其它三個因素：神經質、開放性、友善性，則與所有客觀績效指標無顯著關係。(附錄表三)

(2) 人格五因素次維度(細刻面)

人格五因素之下各由六個細刻面所組成，在總計三十個人格細刻面中，與客觀績效指標呈顯著正相關的為：外向性中的主見(assertiveness)和活躍力(activity)、開放性中的感受(feelings)、嚴謹性中的勝任能力(competence)、忠實(dutifulness)、成就驅力(achievement striving)、自律(self-discipline)。與客觀績效指標呈顯著負相關的為：神經質中的脆弱(vulnerability)、友善性中的謹慎(modesty)。(附錄表四)

(3) 組織公民行為

扶助行為與所有客觀績效指標呈現顯著正相關($p < 0.01$)；公民德行也與所有客觀績效指標呈現顯著正相關($p < 0.05$)。運動員精神則與客觀績效無顯著關係。

(4) 其它個人背景

年齡與銷售金額及佣金收入呈顯著正相關，但是與銷售件數無顯著關係；是否已婚、子女人數、年資則與各個客觀績效指標皆呈顯著正相關；子女人數並且與複合客觀績效指標呈正相關。(附錄表四)

2. 主觀績效與預測變數

(1) 人格五因素

神經質與主觀總績效自評，呈顯著負相關；人格因素中的外向性、開放性和嚴謹性與主觀績效呈正相關。友善性與主觀績效自評，無顯著相

關。

(2) 組織公民行為

包括：扶助行為(Helping Behavior)、公民德行(Civic Virtue)、運動員精神(Sportsmanship)均與主觀自評績效成顯著正相關。

(3) 個人背景

除了子女人數與主觀績效呈顯著正相關之外，其它個人變數皆與主觀績效無顯著相關。

四、討論

本研究之目的在探討人格特質與業務員銷售績效之間的關係，研究工具採用最進發展之NEO-PI人格特質量表，期望透過此一較為細緻之量表，進行較為深入的解析。以下就研究結果及相關問題討論如下：

- (一) NEO-PI 量表之信度為可接受的。五個主構面之係數皆大於 0.76，三十個細刻面中，除了 values、compliance 和 tender-mindedness 偏低之外，其餘之係數皆大於 0.56。
- (二) NEO-PI 量表之因素分析結果，部份因素負荷之結構未完全吻合原量表之設計，特別是外向性及友善性，解釋其結果時需謹慎。
- (三) 嚴謹性與客觀績效顯著正相關，與國外相關研究結果一致，但是外向性和神經質在本研究中並未顯現相關性，與國外相關研究結果有所不同。
- (四) 年齡與年資和客觀績效呈現正相關，而年齡與年資二者皆為時間面的變數，彼此亦存在相關性。進一步的淨相關分析，顯示主要的影響變數為年資。
- (五) 婚姻及子女數亦與客觀績效呈現正相關，這可能反應了時間面或個人所處生涯階段的特性。掌握的親朋好友社交網路、承擔的經濟壓力等，在一個人的生命週期中，可能影響其工作動機及績效表現。
- (六) 本研究有效樣本數為 214，後續相關研究若能增加樣本數，當能有助於驗證量表因素分析之結果，增加其穩定性。若同時擴大樣本的年齡層，或有助於進一步探討生涯階段或生命週期，這一時間面的影響。

五、計畫成果自評

本研究首次以新近發展之人格特質量表(NEO-PI)，探討本國壽險業務員銷售績效與其人格特質之關係。研究結果顯示人格特質確實是顯著之預測變數，人格特質之嚴謹性分數高者，其銷售績效一般而言也較突出，此結論應可做為實務上人力甄選之參考。

NEO PI-R 量表尚待心理學界測試其本土運用的信度與效度，乃至於大樣本施測下的常模建立。就學術方面而言，進一步確認此一人格量表工具，施測運用在本國樣本下，其一般化(generalization)之能力，這可能有助於發現潛藏的社會面、文化面差異，乃至於開展屬於本土化人格理論及其實務運用上的相關研究。

六、參考文獻

- Avia, M. D., Sanchez-Bernardos, S. M. L., Martinez-Arias, M. R., Silva, F. & Grana, J. L. (1995), "The Five-Factor Model— . Relations of the NEO-PI With Other Personality Variables," Personality and Individual Differences, Vol. 19, No. 1, 81- 97.
- Bagozzi, Richard P. (1978), "Salesforce Performance and Satisfaction as a Function of Individual Difference, Interpersonal, and Situational Factors," Journal of Marketing Research, Vol. 15(Nov), 517-531.
- Bagozzi, Richard P. (1980), "Performance and Satisfaction in an Industrial Sales Force: An Examination of Their Antecedents and Simultaneity," Journal of Marketing, Vol. 44, Spring, 65-77.
- Barrick, Murray R. & Mount, Michael K. (1993), "Autonomy as a Moderator of the Relationships Between the Big Five Personality Dimensions and Job Performance," Journal of Applied Psychology, Vol. 78, No. 1, 111-118.
- Barrick, Murray R. & Mount, Michael K. (1991), "The Big Five Personality Dimensions and Job Performance: A Meta-Analysis," Personnel Psychology, Vol. 44, 1-26.
- Barrick, Murray R., Mount, Michael K. & Strauss, Judy P.(1993), "Conscientiousness and Performance of Sales Representatives: Test of the Mediating Effects of Goal Setting," Journal of Applied Psychology, Vol. 78, No. 5, 715-722.
- Behrman, Douglas N., & Perreault, William D. Jr. (1982), "Measuring the Performance of Industrial Salespersons," Journal of Business Research, Vol. 10, 355-370.
- Behrman, Douglas N., & Perreault, William D. Jr. (1984), "A Role Stress Model of the Performance and Satisfaction of Industrial Salespersons," Journal of Marketing, Vol. 48, Fall, 9-21.
- Block, Jack (1995), "A Contrarian View of the Five-Factor Approach to Personality Description," Psychological Bulletin, Vol. 117, No. 2, 187-215.
- Block, Jack (1995), "Going Beyond the Five Factors Given: Rejoinder to Costa and McCrae (1995) and Goldberg and Saucier (1995)," Psychological Bulletin, Vol. 117, No. 2, 226-229.
- Brown, Steven P., & Peterson, Robert A. (1994), "The Effect of Effort on Sales Performance and Job Satisfaction," Journal of Marketing, Vol. 58, April, 70-80.

- Burbeck, E., & Furnham, A. (1984), "Personality and Police Selection: Trait Differences in Successful and Non-successful Applicants to the Metropolitan Police," Personality and Individual Differences, Vol. 5, No. 3, 257-263.
- Challagalla, Goutam N., & Shervani, Tasadduq A. (1996), "Dimensions and Types of Supervisory Control: Effects on Salesperson Performance and Satisfaction," Journal of Marketing, Vol. 60(Jan), 89-105.
- Chan, David, Schmitt, Neal, Sacco, Joshua M., & Deshon, Richard P. (1998), "Understanding Pretest and Posttest Reactions to Cognitive Ability and Personality Tests," Journal of Applied Psychology, Vol. 83, No. 3, 471-485.
- Churchill, G. A., Ford, N. M., Hartley, S. W. & Walker, O. C. (1985), "The Determinants of Salesperson Performance: A Meta-Analysis," Journal of Marketing Research, Vol. 22(May), 103-118.
- Clark, Terry (1990), "International Marketing and National Character: A Review and Proposal for an Integrative Theory," Journal of Marketing, Oct, 66-79.
- Cocanougher, A. Benton, & Ivancevich, John M. (1978), "'BARS' Performance Rating For Sales Force Personnel," Journal of Marketing, Jul, 87-95.
- Collins, Judith M., & Gleaves, David H. (1998), "Race, Job Applicants, and the Five-Factor Model of Personality: Implications for Black Psychology, Industrial/Organizational Psychology, and the Five-Factor Theory," Journal of Applied Psychology, Vol. 83, No. 4, 531-544.
- Costa, P. T., Zonderman, A. B., McCrae, R. R., & Williams, R. B. (1985), "Content and Comprehensiveness in the MMPI: An Item Factor Analysis in a Normal Adult Sample," Journal of Personality and Social Psychology, Vol. 48, No. 4, 925-933.
- Costa, Paul T., & McCrae, Robert R. (1988), "From Catalog to Classification: Murray's Needs and the Five-Factor Model," Journal of Personality and Social Psychology, Vol. 55, No. 2, 258-265.
- Costa, Paul T., & McCrae, Robert R. (1992), "Four Ways Five Factors Are Basic," Personality and Individual Differences, Vol. 13, No. 6, 653-665.
- Costa, Paul T., & McCrae, Robert R. (1992), "Reply to Eysenck," Personality and Individual Differences, Vol. 13, No. 8, 861-865.
- Costa, Paul T., & McCrae, Robert R. (1995), "Solid Ground in the Wetlands of Personality: A Reply to Block," Psychological Bulletin, Vol. 117, No. 2, 216-220.
- Cortina, J. M., Doherty, M. L., Schmitt, N., Kaufman, G., & Smith, R. G. (1992), "The 'Big Five' Personality Factors in the IPI and MMPI: Predictors of Police Performance," Personnel Psychology, Vol. 45, 119-140.
- Cron, William L. (1984), "Industrial Salesperson Development: A Career Stages Perspective," Journal of Marketing, Vol. 48, Fall, 41-52.
- Cron, William L., & Slocum, John W. Jr. (1986), "The Influence of Career Stages on Salespeople's Job Attitudes, Work Perceptions, and Performance," Journal of Marketing Research, Vol. 23, May, 119-129.
- Crosby, Lawrence A., & Stephens, Nancy (1987), "Effects of Relationship Marketing on Satisfaction, Retention, and Prices in the Life Insurance Industry," Journal of Marketing Research, Vol. 24, Nov, 404-411.
- Decarlo, Thomas E., & Leigh, Thomas W. (1996), "Impact of Salesperson Attraction on Sales Managers' Attributions and Feedback," Journal of Marketing, Vol. 60, April, 47-66.
- Dubinsky, A. J., Kotabe, M., Lim, C. U. & Wagner, W. (1997), "The Impact of Values on Salespeople's Job Responses: A Cross-National Investigation," Journal of Business Research, Vol. 39, 195-208.
- Eysenck, H. J. (1991), "Dimensions of Personality: 16, 5 or 3?—Criteria for a Taxonomic Paradigm," Personality and Individual Differences, Vol. 12, No. 8, 773-790.
- Eysenck, H. J. (1992), "Four Ways Five Factors are Not Basic," Personality and Individual Differences, Vol. 13, No. 6, 667-673.
- Eysenck, H. J. (1992), "A Reply to Costa and McCrae. P or A and C—The Role of Theory," Personality and Individual Differences, Vol. 13, No. 8, 867-868.
- Giniger, Seymour, Dispenzieri, Angelo, & Eisenberg, Joseph (1983), "Age, Experience, and Performance on Speed and Skill Jobs in an Applied Setting," Journal of Applied Psychology, Vol. 68, No. 3, 469-475.
- Goldberg, Lewis R. (1990), "An Alternative 'Description of Personality': The Big-Five Factor Structure," Journal of Personality and Social Psychology, Vol. 59, No. 6, 1216-1229.
- Goldberg, Lewis R., & Saucier, Gerard (1995), "So What Do You Propose We Use Instead? A Reply to Block," Psychological Bulletin, Vol. 117, No. 2, 221-225.
- Heaven, P. C. L., Connors, J. & Stones, C. R. (1994), "Three or Five Personality Dimensions? An Analysis of Natural Language Terms in Two Cultures," Personality and Individual Differences, Vol. 17, No. 2, 181-189.
- Hough, L. M., Eaton, N. K., Dunnette, M. D., Kamp, J. D., & McCloy, R. A. (1990), "Criterion-Related Validities of Personality Constructs and the Effect of Response Distortion on Those Validities," Journal of Applied Psychology, Vol. 75, No. 5, 581-595.
- Hunter, John E., Schmidt, Frank L., & Judiesch, Michael K. (1990), "Individual Differences in Output Variability as a Function of Job Complexity," Journal of Applied Psychology, Vol. 75, No. 1, 28-42.
- Ingram, T. N. & Bellenger, Danny N. (1983), "Personal and Organizational Variables: Their Relative Effect on Reward Valences of Industrial Salespeople," Journal of Marketing Research, Vol. 20(May), 198-205.

- Johnston, Wesley J., & Kim, Keysuk (1994), "Performance, Attribution, and Expectancy Linkages in Personal Selling," Journal of Marketing, Vol. 58, Oct, 68-81.
- Judge, Timothy A., Martocchio, Joseph J. & Thoresen, Carl J. (1997), "Five-Factor Model of Personality and Employee Absence," Journal of Applied Psychology, Vol. 82, No. 5, 745-755.
- Lamont, Lawrence M., & Lundstrom, William J. (1977), "Identifying Successful Industrial Salesmen by Personality and Personal Characteristics," Journal of Marketing Research, Vol. 14(November), 517-529.
- Keller, Robert T. (1997), "Job Involvement and Organizational Commitment as Longitudinal Predictors of Job Performance: A Study of Scientists and Engineers," Journal of Applied Psychology, Vol. 82, No. 4, 539-545.
- Kohli, Ajay K. (1989), "Effects of Supervisory Behavior: The Role of Individual Differences Among Salespeople," Journal of Marketing, Vol. 53(Oct), 40-50.
- Kohli, Ajay K., & Jaworski, Bernard J. (1994), "The Influence of Coworker Feedback on Salespeople," Journal of Marketing, Vol. 58, October, 82-94.
- Kohli, Ajay K., Shervani, Tasadduq A., & Challagalla, Goutam N. (1998), "Learning and Performance Orientation of Salespeople: The Role of Supervisors," Journal of Marketing Research, Vol. 35(May), 263-274.
- Mackenzie, Scott B., Podsakoff, Philip M., & Ahearne, Michael (1998), "Some Possible Antecedents and Consequences of In-Role and Extra-Role Salesperson Performance," Journal of Marketing, Vol. 62, July, 87-98.
- Mackenzie, Scott B., Podsakoff, Philip M., & Fetter, Richard (1993), "The Impact of Organizational Citizenship Behavior on Evaluations of Salesperson Performance," Journal of Marketing, Vol. 57, January, 70-80.
- McCrae, Robert R., & Costa, Paul T. (1987), "Validation of the Five-Factor Model of Personality Across Instruments and Observers," Journal of personality and Social Psychology, Vol. 52, No. 1, 81-90.
- McEvoy, Glenn M., & Cascio, Wayne F. (1989), "Cumulative Evidence of the Relationship Between Employee Age and Job Performance," Journal of Applied Psychology, Vol. 74, No. 1, 11-17.
- Montag, I. & Levin, J. (1994), "The Five Factor Model and Psychopathology in Nonclinical Samples," Personality and Individual Differences, Vol. 17, No. 1, 1-7.
- Oliver, Richard L. (1974), "Expectancy Theory Predictions of Salesmen's Performance," Journal of Marketing Research, Vol. 11, August, 243-253.
- Podsakoff, Philip M. & Mackenzie, Scott B. (1994), "Organizational Citizenship Behaviors and Sales Unit Effectiveness," Journal of Marketing Research, Vol. 31, No. 3, 351-363.
- Podsakoff, Philip M., Ahearne, Michael, & Mackenzie, Scott B. (1997), "Organizational Citizenship Behavior and Quality of Work Group Performance," Journal of Applied Psychology, Vol. 82, No. 2, 262-270.
- Rosse, Joseph G., Stecher, Mary D., Miller, Janice L., & Levin, Robert A. (1998), "The Impact of Response Distortion on Preemployment Personality Testing and Hiring Decisions," Journal of Applied Psychology, Vol. 83, No. 4, 634-644.
- Sackett, Paul R., Gruys, Melissa L., & Ellingson, Jill E. (1998), "Ability–Personality Interactions When Predicting Job Performance," Journal of Applied Psychology, Vol. 83, No. 4, 545-556.
- Salgado, Jesus F. (1997), "The Five Factor Model of Personality and Job Performance in the European Community," Journal of Applied Psychology, Vol. 82, No. 1, 30-43.
- Schouwenburg, H. C. & Lay, C. H. (1995), "Trait Procrastination and the Big-Five Factors of Personality," Personality and Individual Differences, Vol. 18, No. 4, 481-490.
- Silva, F., Avia, D., Sanz, J., Martinez-Arias, R., Grana, J. L., & Sanchez-Bernardos, L., "The Five Factor Model-I. Contributions to the Structure of the NEO-PI," Personality and Individual Differences, Vol. 17, No. 6, 741-753.
- Szymanski, David M., & Churchill, Gilbert A. (1990), "Client Evaluation Cues: A Comparison of Successful and Unsuccessful Salespeople," Journal of Marketing Research, Vol. 27, May, 163-174.
- Tett, R. P., Jackson, D. N., Rothstein, M., & Reddon, J. R. (1994), "Meta-Analysis of Personality-Job Performance Relations: A Reply to Ones, Mount, Barrick, and Hunter(1994)," Personnel Psychology, Vol. 47, 157-172.
- Tett, R. P., Jackson, D. N., & Rothstein, M. (1991), "Personality Measures as Predictors of Job Performance: A Meta-Analytic Review," Personnel Psychology, Vol. 44, 703-742.
- Trevor, Charlie O., Gerhart, Barry, & Boudreau, John W. (1997), "Voluntary Turnover and Job Performance: Curvilinearity and the Moderating Influences of Salary Growth and Promotions," Journal of Applied Psychology, Vol. 82, No. 1, 44-61.
- Tett, R. P., Jackson, D. N. & Rothstein, M. (1991), "Personality Measures as Predictors of Job Performance: A Meta-Analytic Review," Personnel Psychology, 44, 703-742.
- Vassend, O. & Skrandal, A. (1995), "Factor Analytic Studies of the NEO Personality Inventory and the Five-Factor Model: The Problem of High Structural Complexity and Conceptual Indeterminacy," Personality and Individual Differences, Vol. 19, No. 2, 135-147.
- Vincur, Andrew J., Schippmann, Jeffery S., Switzer, Fred S., & Roth, Philip L. (1998), "A Meta-Analytic Review of Predictors of Job Performance for Salespeople," Journal of Applied

Psychology, Vol. 83, No. 4, 586-597.

Waldman, David A., & Avolio, Bruce J. (1986), "A Meta-Analysis of Differences in Job Performance," Journal of Applied Psychology, Vol. 71, No. 1, 33-38.

Zimbardo, P.G., "Psychology and Life," 12ed, Stanford University. 心理學, 游恆山 譯, 五南書局, p795.

七、附錄

(表一) 組織公民行為(OCBs)及主觀總績效自評量測題目

Helping

1. 我會撥出時間去幫助面臨工作問題的同事。
2. 我願意從繁忙的行程表中抽出時間，協助招募或訓練新同事。
3. 在採取那些可能會影響他人的行動之前，我會先體察他人的立場。
4. 在公司中，我會採取行動去防範或避免人際間的問題發生。
5. 在同仁沮喪時，我會給予鼓勵、打氣。
6. 部門內彼此的意見有爭執時，我常扮演調解者的角色。
7. 當爭辯或反對意見發生時，我是部門內恢復安定的影響力。

Civic Virtue

8. 我會努力執行那些雖不必要，但有助於部門或公司形象的任務。
9. 我會出席訓練或溝通訊息的會議，即使這些會議並不強制參與。
10. 我會出席並熱烈地參與部門會議。

Sportsmanship

11. 我常耗費許多時間去抱怨一些細微的瑣事。Ⓢ
12. 對部門或公司正在進行的事情，我喜歡挑毛病，找缺點。Ⓢ
13. 我喜歡誇大問題的嚴重性，有小題大做的傾向。Ⓢ
14. 我經常較關切情境中錯誤的一面，而較少看積極的一面。Ⓢ

Overall Performance Rating

15. 就所有層面整體而言，我是個傑出的業務員。
16. 身為業務員，我全然服從上司所要求的方式來執行我的工作。
17. 我是所屬部門中最有價值的業務員之一。

註：1.所有題目以 7 點量表量測，Ⓢ表示負計分。

(表二)NEO PI-R 量表之內部一致性與因素結構

NEO PI-R scale	Coefficient alpha	Factor				
		N	E	O	A	C
Domains						
Neuroticism	.92					
Extraversion	.89					
Openness	.85					
Agreeableness	.77					
Conscientiousness	.91					
Neuroticism facets						
N1: Anxiety	.75	.77	-.20	-.08	-.13	-.18
N2: Angry Hostility	.73	.73	.26	-.05	-.28	-.20
N3: Depression	.76	.77	-.30	-.09	-.13	-.29
N4: Self-Consciousness	.69	.58	-.38	-.11	-.24	-.17
N5: Impulsiveness	.68	.48	.33	.24	-.07	-.51
N6: Vulnerability	.80	.63	-.24	-.13	-.11	-.55
Extraversion facets						
E1: Warmth	.78	-.26	.34	.19	.71	-.09
E2: Gregariousness	.69	-.28	.36	-.04	.52	-.25
E3: Assertiveness	.66	-.19	.71	.17	.08	.33
E4: Activity	.57	-.06	.72	.10	.21	.13
E5: Excitement-Seeking	.63	-.06	.37	.57	.05	-.10
E6: Positive Emotions	.82	-.24	.55	.28	.51	-.13
Openness facets						
O1: Fantasy	.73	.26	.08	.53	.17	-.30
O2: Aesthetics	.72	-.03	.10	.50	.49	.12
O3: Feelings	.63	.17	.32	.56	.46	.05
O4: Actions	.58	-.27	.18	.58	.02	-.13
O5: Ideas	.86	-.03	.08	.75	.08	.26
O6: Values	.22	-.32	-.16	.50	.15	-.06
Agreeableness facets						
A1: Trust	.66	-.37	-.16	.13	.64	.14
A2: Straightforwardness	.62	.05	-.48	-.38	.22	.19
A3: Altruism	.68	-.14	.05	.07	.71	.34
A4: Compliance	.39	-.33	-.56	.05	.38	.08
A5: Modesty	.65	.30	-.55	-.37	-.06	-.17
A6: Tender-Mindedness	.47	-.03	-.08	.07	.67	.14
Conscientiousness facets						
C1: Competence	.70	-.27	.36	.21	.12	.70
C2: Order	.70	-.03	.02	-.11	-.15	.71
C3: Dutifulness	.60	-.02	.01	-.24	.27	.74
C4: Achievement Striving	.81	-.22	.41	.19	.13	.62
C5: Self-Discipline	.61	-.29	.18	.06	.22	.72
C6: Deliberation	.71	-.22	-.22	-.02	.06	.71

註：樣本數 214，Varimax轉軸，因素負荷大於 0.4 以粗體表示。

(表三)績效準則、人格特質五因素之間相關係數

變數	M	SD	績效準則					人格特質因素				
			1	2	3	4	5	6	7	8	9	
1.銷售額(FYP ; 萬)	63.6	48.9	.—									
2.佣金額(FYC ; 萬)	21.7	15.2	.97**	.—								
3.銷售件(Case ; 件)	22.7	15.4	.83**	.90**	.—							
4.客觀總績效	—	—	.97**	.99**	.94**	.—						
5.神經質(N)	15.3	2.7	-.10	-.09	-.08	-.09	.—					
6.外向性(E)	20.6	2.3	.10	.14*	.14*	.13	-.39**	.—				
7.開放性(O)	20.4	2.1	.03	.07	.12	.08	-.18**	.55**	.—			
8.友善性(A)	21.3	1.6	-.03	-.05	-.05	-.05	-.26**	-.07	.00	.—		
9.嚴謹性(C)	21.7	2.3	.18*	.20**	.22**	.21**	-.59**	.24**	.10	.19**	.—	

註：1.**表示相關性顯著水準為 0.01(2-tailed)

*表示相關性顯著水準為 0.05(2-tailed)

2.績效指標以最近六個月公司內部記錄加總計算。客觀總績效為銷售額、佣金額、銷售件之標準化分數加總而得。

3.人格特質五因素各由六個細刻面(facets)之平均分數(5 點量表)加總，計分之理論範圍為 6-30。

(表四)個人背景、人格五因素及細刻面與主、客觀績效準則之相關係數

個人變數	客觀績效記錄				主觀績效準則	
	銷售額	佣金額	銷售件	客觀總績效	整體績效自評	
個人變數						
年齡	.19**	.14**	.09	.14*	.07	
婚姻	.22**	.19**	.20**	.21**	.09	
子女數	.31**	.28**	.27**	.30**	.15*	
年資	.30**	.25**	.14*	.24**	.08	
Domains						
Neuroticism	-.10	-.09	-.08	-.09	-.45**	
Extraversion	.10	.14*	.14*	.13	.44**	
Openness	.03	.07	.12	.08	.22**	
Agreeableness	-.03	-.05	-.05	-.05	-.03	
Conscientiousness	.18*	.20**	.22**	.21**	.57**	
Neuroticism facets						
N1: Anxiety	-.03	-.01	.00	-.02	-.31**	
N2: Angry Hostility	-.04	-.03	-.03	-.03	-.27**	
N3: Depression	-.07	-.06	-.07	-.07	-.43**	
N4: Self-Consciousness	-.12	-.10	-.09	-.10	-.40**	
N5: Impulsiveness	-.03	-.04	-.04	-.04	-.16*	
N6: Vulnerability	-.18**	-.18**	-.16*	-.18**	-.53**	
Extraversion facets						
E1: Warmth	-.02	.01	.04	.01	.28**	

E2: Gregariousness	.03	.06	.10	.07	.26**
E3: Assertiveness	.23**	.25**	.21**	.24**	.50**
E4: Activity	.16*	.21**	.21**	.20**	.37**
E5: Excitement-Seeking	.01	.02	.03	.02	.19**
E6: Positive Emotions	.04	.05	.04	.04	.31**
Openness facets					
O1: Fantasy	-.03	-.00	.04	.00	-.09
O2: Aesthetics	.02	.05	.08	.05	.28**
O3: Feelings	.12	.16*	.20*	.17*	.18**
O4: Actions	-.02	.01	.06	.02	.23**
O5: Ideas	.05	.06	.09	.07	.20**
O6: Values	-.05	-.03	.01	-.03	.05
Agreeableness facets					
A1: Trust	-.02	-.02	.01	-.01	.20**
A2: Straightforwardness	-.06	-.11	-.13	-.10	-.18**
A3: Altruism	.04	.05	.06	.05	.35**
A4: Compliance	.12	.12	.13	.13	.06
A5: Modesty	-.17*	-.20**	-.23**	-.21**	-.52**
A6: Tender-Mindedness	.03	.03	.02	.03	.12
Conscientiousness facets					
C1: Competence	.22**	.25**	.23**	.24**	.56**
C2: Order	-.02	-.03	.00	-.02	.20**
C3: Dutifulness	.14*	.16*	.14*	.15*	.37**
C4: Achievement Striving	.18**	.22**	.25**	.23**	.66**
C5: Self-Discipline	.23**	.26**	.30**	.27**	.59**
C6: Deliberation	.08	.09	.12	.10	.22**
Organizational Citizenship Behaviors(OCBs)					
Helping behavior	.20**	.22**	.19**	.21**	.51**
Civic Virtue	.18*	.18*	.14*	.17*	.53**
Sportsmanship	.05	.06	.12	.08	.37**

註：1.**表示相關性顯著水準為 0.01(2-tailed)

*表示相關性顯著水準為 0.05(2-tailed)