

The Consequences of Perceived Usefulness of Training (PUT): The Self-Efficacy Perspective

Jih-Hua Yang¹, Shih-Chieh Fang¹, & Ching-Ying Huang¹

¹Department of Business Administration, National Cheng Kung University, Taiwan

Correspondence: Jih-Hua Yang, Department of Business Administration, National Cheng Kung University, Taiwan.

Received: September 26, 2017

Accepted: October 16, 2017

Online Published: October 31, 2017

doi:10.5539/ibr.v10n12p80

URL: <https://doi.org/10.5539/ibr.v10n12p80>

Abstract

This study aimed to exploring the consequences of perceived usefulness of training (PUT) and use self-efficacy perspective. Questionnaire was the tool of collecting data from a sample of (240) pharmacists. Our findings confirmed that there is a positive effect of PUT on task performance and context performance. As well as, there are full effect professional competency and core competency on the relationship between PUT and task performance and context performance. Finally, our study proposed some theoretical and managerial implications.

Keywords: perceived usefulness of training, professional competency, core competency, task performance, and context training

1. Introduction

The concept of competency was made by Stogdill (1948), Katz (1955), and Mann (1965), theories and practices regarding competency have flourished. The studies of competency's link to managerial success and to effective performance in literature also proliferated and widened into other fields (e.g., Boyatzis, 1982; Du Gay, Salaman, & Rees, 1996; Lawler, 1994; Mansfield, 1996; McCall & Lombardo, 1983; McLagan, 1996; Mirabile, 1997; Posner & Kouzes, 1988; Spencer & Spencer, 1993). Competency has great considerable practicality and has contributed to improving both individual and organizational performance (McClelland, 1973; Spencer et al., 1993). This notion of competency can also serve in health care and extend to other medical personnel et al. It is essential to raise the quality of medical services in health care industry. From the view of human resources, we must strengthen the professional competency and core competency of health manpower beyond the traditional technical field. In practice, the medical industry has become increasingly focused on the competency indicators of task and context performance. This study exploring the consequences of perceived usefulness of training (PUT) and use self-efficacy perspective and affects the output task and context performance of medical personnel.

McClelland (1973) refers to this concept of competence research indicates that an excellent worker performance, including attitude, cognitive and personality traits and other factors that defined competency. Boyatzis (1982) re-defined competency as a latent individual trait; this trait can produce superior efficiency of task and context performance. But, the definition of competency is rather vague (van der Klink and Boon, 2003). In order to ensure the definition of competency, scholars have chosen a broad definition (Delamare Le Deist & Winterton, 2005). This study following to Spencer & Spencer (1993) task and context competency is defined as the potential underlying characteristic of individuals, characteristic that include more than only work-related duties, features which inspire higher expectations of employers, and are likely to positively influence the behavior and performance of individual performance (p.9).

In this study, professional and core competency under the self-efficacy perspective that play important mechanism role between perceived usefulness of training (PUT) and task performance and context performance in pharmacists.

2. Theoretical Background and Hypotheses Development

2.1 Professional Competency and Core Competency

In the decades following McClelland's (1973) publication, many scholars also re-defined their research parameters based on the idea of competency between the 1980s and 1990s. Competency can be summarized by a

few priorities: first, competency can be observed and measured; secondly, competency requires knowledge, skills, and abilities; third, competency is associated with the performance output; and, finally, competency can be taught and acquired through training. This study will use the definition made by Spencer & Spencer (1993): competency is the basic potential characteristics of an individual, characteristics needed in work-related positions and will further expectations or affect individual behavior and performance. Spencer & Spencer (1993) divided competency into the implicit and explicit. The implicit elements contain self-concept, traits and motives, and the explicit element includes skills and knowledge. Spencer & Spencer (1993) focused on the explicit elements because they are most likely to be developed and are more cost-effective. This study focuses on the explicit elements of competency and divides it into professional competency and core competency.

2.2 Effects of Perceived Usefulness of Training (PUT) on Task Performance and Context Performance

Through training, you can increase employee knowledge, ability and achieving organizational goals. That is, systematic training program used to train the professional knowledge, skills, and attitudes. Human resource development includes training (Nadler & Nadler, 2012), it needed to develop staff to meet the requirements of their work. (Abiodun, 1999). The purpose of perceived usefulness of training (PUT) is to train employees, enhance their work ability, and should coincide with organizational strategic planning. Training basic function is to upgrade the ability of employees and training is determined at the improvement employees working and facilitates staff capability and adapted to organizational strategic planning. Gilley, Egglund, & Gilley (2002) put forward training is considered at affordable the existing employee job performance. In the short-term it is easier to see the results on task performance and context performance when training is more focused on goal-oriented (Thang, Quang, & Buyens, 2010). Accordingly, the present study suggests that enhanced employee task performance and context performance is the main purpose of learning within an enterprise. The purpose of task performance and context performance is to provide program objectives and organizational learning experiences and opportunities which will enhance employee's current or future performance and improve organizational performance. Based on the above reasoning, hypotheses were formulated as a follows:

Hypothesis 1: Perceived usefulness of training (PUT) will be positively related to task performance.

Hypothesis 2: Perceived usefulness of training (PUT) will be positively related to context performance.

2.3 The Mechanisms Role of Professional Competency and Core Competency

In order to the promotion of self-efficacy, the key are subject competency and acquired learning (Nahavandi, 2009). From the social learning theory of self-efficacy perspective, past achievements, alternative experience, verbal persuasion, and evoked emotions will form self-efficacy, and then through self-awareness system, this self-efficacy will be assessed. Through experience and observation form others' speech and behavior, personal will imitate the successful experience of others, will encourage positive feelings and behavior. Individuals through positive emotions will enhance self-efficacy, which, when followed by self-assessment, will lead to strong confidence about things, having a strong positive impact on task performance and context performance, thus causing further performance to be enhanced. Self-efficacy is the ability to continue to drive personal performance and motivation (Bandura, 1986), and self-efficacy will enhance individuals willing to accept and complete the challenge to get better performance (Bandura 1986; Wood & Bandura, 1989). Based on the above reasoning, hypotheses were formulated as a follows:

Hypothesis 3: Professional competency will mediate the positive relationship between perceived usefulness of training (PUT) and task performance.

Hypothesis 4: Core competency will mediate the positive relationship between Perceived usefulness of training (PUT) and context performance.

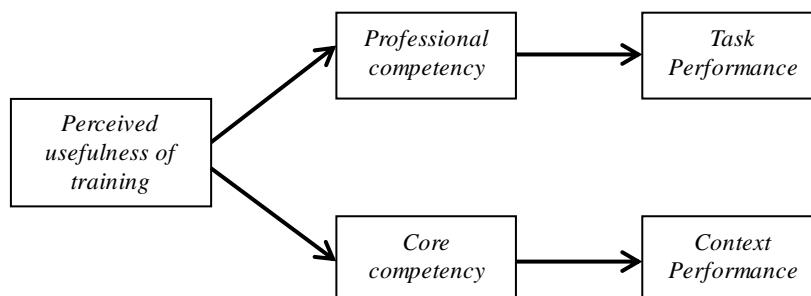


Figure 1. Theoretical model

3. Method

This study was based on a causal model which tries to exploring the consequences of perceived usefulness of training (PUT) in pharmacists.

3.1 Sample and Procedure

In this study, in order to avoid common method variance (CMV; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), using paired questionnaire. As subjects, this study uses pharmacists who were involved in a continuing education training process. In total, four echelons comprised of 240 pharmacists received training. After the training was completed, the researchers directly accessed pharmacists, pharmacists completed the competency and training questionnaire on the spot. And After six months, the workplace of the trained pharmacists' supervisor completed the task and context performance questionnaire. Part of the questionnaire commissioned by the colleagues on behalf of the distributed and collected, in order to ensure confidentiality, the questionnaires were collected promptly after they were filled out and placed in the enclosed envelope. A total of 240 valid questionnaires were obtained. In this study, members of the medical industry served as the population of the study. Individual serve as the unit of measurement. Grassroots professional pharmacists who engaged in continuing education were asked to fill out the questionnaires. In the research project, pharmacists from different back grounds and work places participated: 154 respondents work in hospital pharmacies, 55 in community pharmacies, 18 in clinics, and 13 are pharmaceutical or biotech drug dealers, making a total of 240 people. Regarding the participants' characteristics, 105 were male, 135 were female, with women accounting for 56.25% of the total; regarding age 102 of the respondents are between 21 and 30 years old, 62 between 31 and 40, 54 between 41 and 50, 17 between 51 and 60, and 5 are over 60 years old), The 21-30 year old group is the largest, and accounts for 42.50% of the total. As for education, the subjects can be broken down as follows: 16 bachelors (excluding) degree, 171 bachelor degrees, 49 master's degrees, and 4 PhDs. The largest group is made of up those with a bachelor's degree, accounting for 71.25% of the total. Regarding length of experience in the field, the respondents can be broken down as follows: 116 people (1-5 years), 38 people (6-10 years), 25 people (11-15 years), 29 people (16-20 years), 17 people (21-25 years), 15 people (26 - 30 years). Exactly half of the respondents have worked in the field for in 1-5 years, accounting for 48.33% of the total.

3.2 Measures

The survey items were provided using 5-point Likert scales with response scales being "strongly disagree"(1) and "strongly agree"(5). Independent variable is perceived usefulness of training (PUT), dependent variable is task performance and context performance and mediator variables include professional competency and core competency. Control variables include demographic variables. Pharmacists' work is statutory and exclusive. In the professional competency and core competency questionnaire design, business content which is controlled by pharmaceutical affairs regulations, were employed to measure the pharmacists' competency. According to the pharmaceutical affairs regulations, examine questions of competency scale through five experts, a total of 31 items, each including a professional competency and core competency. A total of 17 questions focus on an examination of professional competency. A total of 14 questions focus on core competency. The results of this study are reliability analysis. The Cronbach's alphas are 0.94 and 0.93 for professional competency and core competency, respectively. Regarding the topic of performance, we used the task performance and context performance scale developed by Motowidlo & Van Scotter, (1994). Task performance scale includes seven items. The Cronbach's α value of 0.90 is good. Context performance scale includes six items. The Cronbach's α value of 0.91 is good. When looking at training, we used perceived usefulness of training (PUT) scale developed by Giangreco et al., (2009). The training scale includes 5 items. The overall Cronbach's α value of 0.89 is good.

4. Result

4.1 Correlation Analysis

Table 1 shows descriptive statistics and inter-correlations for the study variables. The reliability coefficients were all greater than 0.89. The age correlated positively with tenure ($r = .83$, $p < 0.001$). The tenure correlated positively with professional competency ($r = .16$, $p < 0.05$). The tenure correlated positively with core competence ($r = .16$, $p < 0.05$). The tenure correlated positively with core performance ($r = .13$, $p < 0.05$). All variables positively related to each other ($r = .19 \sim .76$, $p < 0.001$)

Table 1. Means, Standard Deviations, and Inter-correlations

variables	M	SD	1	2	3	4	5	6	7
1. Age	36.14	10.69	-						
2. Tenure	9.63	8.93	.83***	-					
3. PUT	3.74	0.57	.10	.12	(.89)				
4. PC	3.58	0.65	.10	.16*	.22***	(.94)			
5. CC	4.00	0.53	.08	.16*	.37***	.50***	(.93)		
6. TP	4.07	0.46	.06	.07	.19***	.44***	.70***	(.90)	
7. CP	4.13	0.44	.09	.13*	.27***	.37***	.69***	.76***	(.91)

Note. N = 240. Coefficient alphas are listed in parentheses along the diagonal.

PUT= perceived usefulness of training, PC = professional competency, CC = core competency,

TP = task performance, CP= context performance * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

4.2 Hypothesis Testing

Table 2 shows the results of hierarchical regression. We tested the hypotheses by regressing perceived usefulness of training and task performance on the control variables (step 1), the main effects of perceived usefulness of training (step 2). At step 2, the main effect of perceived usefulness of training on task performance has significant ($\beta = .186, p < .01$). Hypothesis 1 was supported.

Table 3 shows the results of hierarchical regression. We tested the hypotheses by regressing perceived usefulness of training and context performance on the control variables (step 1), the main effects of perceived usefulness of training (step 2). At step 2, the main effect of perceived usefulness of training on context performance has significant ($\beta = .260, p < .001$). Hypothesis 2 was supported.

Table 4 shows the results of hierarchical regression. We tested the hypotheses by regressing perceived usefulness of training and task performance on the control variables (step 1), the main effects of perceived usefulness of training (step 2), and the mediating effect of professional competency (step 3). At step 2, the main effect of perceived usefulness of training on task performance has significant ($\beta = .186, p < .01$), the mediating effect of professional competency on task performance has significant ($\beta = .419, p < .001$). Hypothesis 3 was supported, as the beta for perceived usefulness of training became insignificant ($\beta = .102, p > .005$) when professional competency was included, demonstrating full mediation for task performance.

Table 5 shows the results of hierarchical regression. We tested the hypotheses by regressing perceived usefulness of training and context performance on the control variables (step 1), the main effects of perceived usefulness of training (step 2), and the mediating effect of core competency (step 3). At step 2, the main effect of perceived usefulness of training on context performance has significant ($\beta = .260, p < .001$), the mediating effect of core competency on context performance has significant ($\beta = .669, p < .001$). Hypothesis 3 was supported, as the beta for perceived usefulness of training became insignificant ($\beta = .024, p > .005$) when core competency was included, demonstrating full mediation for context performance.

Table 2. Hierarchical Regression Analysis

Variables	Task Performance	
	Model 1	Model 2
Control variable		
age	-.006	-.008
tenure	.074	.053
Independent variable		
perceived usefulness of training		.186**
R ²	.005	.039
F	.572	3.181*
ΔR ²	.005	.034
ΔF	.572	8.363**

Note. N = 240. * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 3. Hierarchical Regression Analysis

Variables	Context Performance	
	Model 1	Model 2
Control variable		
age	-.056	-.058
tenure	.176	.147
Independent variable		
perceived usefulness of training		.260***
R ²	.018	.085
F	2.162	7.276***
ΔR ²	.018	.067
ΔF	2.162	17.209***

Note. N = 240. * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 4. Hierarchical Regression Analysis

Variables	Task Performance		
	Model 1	Model 2	Model 3
Control variable			
age	-.006	-.008	.038
tenure	.074	.053	-.040
Independent variable			
perceived usefulness of training		.186**	.102
Mediator variable			
professional competency			.419***
R ²	.005	.039	.203
F	.572	3.181*	14.935***
ΔR ²	.005	.034	.164
ΔF	.572	8.363**	48.284***

Note. N = 240. * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 5. Hierarchical Regression Analysis

Variables	Context Performance		
	Model 1	Model 2	Model 3
Control variable			
age	-.056	-.058	.054
tenure	.176	.147	-.026
Independent variable			
perceived usefulness of training		.260***	.024
Mediator variable			
core competency			.669***
R ²	.018	.085	.462
F	2.162	7.276***	50.390***
ΔR ²	.018	.067	.377
ΔF	2.162	17.209***	164.597***

Note. N = 240. * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

5. Discussion

5.1 Discussion and Conclusions

In terms of the control variables, pharmacists' age and seniority, regardless of task performance and context performance, do not seem to be significant. In the main effect, however, these study findings confirmed that there is a positive role of perceived usefulness of training in improving task performance and context performance.

Regarding the mediator effect, the results of the study revealed that there is a significant impact. There are full effect of professional competency and core competency on the relationship between perceived usefulness of training and task performance and context performance. The main reason is that pharmacists have expertise knowledge and should be considered medical technical workers. The work environment and the medical system do not allow for any negligence. On the pharmacists' work content, professional-oriented results are significantly better than experience-oriented results.

5.2 Contribution

Since the 1940s, first, scholars have come to pay more attention to the impact of the performance of competency. This study proposes task performance and context performance, aimed at developing further insight into

competency perspectives as well as the mediating role of perceived usefulness of training and task performance and context performance. Secondly, the main effect of the present study, regarding the self-efficacy perspective is worth noting. Professional and core competency will through individual self-efficacy plays a mediating mechanism between perceived usefulness of training and task performance and context performance. This information should extend the scope of self-efficacy. Third, from the practical perspective, competency has become an important indicator of the medical industry. The results of this study make clear that whether it is through professional competency and core competency has a significant impact on task performance and context performance.

Therefore, this study makes the following recommendations; first, in addition to strengthening the training, the practice of professional and core competency should be further strengthened in the field of pharmacy care-related businesses, to enhance the quality of medical care and provide clients with more substantive help. In addition, the pharmacy industry's continuing education is often limited to those forced to participate, which can cause distress, in particular, the timing of the implementation of surface pharmacists often becomes troubled. This study suggests that if we make modest improvements in the training to make them more flexible, for example, open online credit courses to enable trainees' pharmacists to customize the selection of learning places, it should increase their learning willingness and strengthen professional and core competency in pharmacy care business.

5.3 Limitations and Future Research

In this study, the researcher seeks to improve the design and analysis, but there are still several points which should be noted. First, regarding external validity issues, the present study's sample survey of pharmacists failed to include other medical personnel, such as doctors, nurses and hospital administration staff. Second, in terms of research scale, the present study, although substantially complete in its efforts at sorting out professional competency and core competency, still finds it difficult to avoid the problem of lack of comprehensiveness. We propose that future research should focus on the integrity of the medical industry functions scale in order to enhance the quality scale. Third, as for training evaluation, although the present study adopts the more practical value of the first stage of the reaction level, the questionnaire respondents participated in training provided by the staff, however, to be able to arrive at a more complete understanding of training, it is recommended that in future research projects the scholars should simultaneously use the full four-stage level.

References

- Abiodun, E. (1999). Human Resources management, an overview. Concept Publication, Shomolu, Lagos, 110-121.
- Athey, T. R., & Orth, M. S. (1999). Emerging competency methods for the future. *Human Resource Management*, 38, 215-226. [https://doi.org/10.1002/\(SICI\)1099-050X\(199923\)38:3<215::AID-HRM4>3.0.CO;2-W](https://doi.org/10.1002/(SICI)1099-050X(199923)38:3<215::AID-HRM4>3.0.CO;2-W)
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall, Inc.
- Boyatzis, R. E. (1982). The Competent Manager: A Model for Effective Performance. New York: Wiley
- Cofsky, K. M. (1993). Critical Keys to Competency-Based Pay. *Compensation and Benefits Review*, 25(6), 46-52. <https://doi.org/10.1177/088636879302500609>
- Delamare, L., Deist, F., & Winterton, J. (2005). What is competence? *Human Resource Development International*, 8, 27-46. <https://doi.org/10.1080/1367886042000338227>
- Du Gay, P., Salaman, G., & Rees, B. (1996). The conduct of management and the management of conduct: Contemporary managerial discourse and the constitution of the 'competent' manager. *Journal of Management Studies*, 33, 263-282. <https://doi.org/10.1111/j.1467-6486.1996.tb00802.x>
- Dubois, D. D. (1993). Competency-Based Performance Improvement: A Strategy for Organizational Change. Amherst: HRD Press.
- Gianguco, A., Sebastiano, A., & Peccei, R. (2009). Trainees' reactions to training: an analysis of the factors affecting overall satisfaction with training. *The international journal of human resource management*, 20(1), 96-111. <https://doi.org/10.1080/09585190802528417>
- Gilley, J. W., Egglund, S. A., & Gilley, A. M. (2002). Principles of human resource development. Basic Books.
- Jackson, S. E., & Schuler, R. S. (2002). Managing individual performance: An individual perspective. In: S. Sonnentag (ed.): Psychological management of individual performance. New York: John Wiley and Sons: 371-390.

- Katz, R. L. (1955). Skills of an effective administrator. *Harvard Business Review*, 33, 33-42.
- Lawler, E. E. (1994). From job-based to competency-based organizations. *Journal of Organizational Behavior*, 15, 3-15. <https://doi.org/10.1002/job.4030150103>
- Ledford, G. E. Jr. (1995). Paying for the skills, knowledge, and competencies of knowledge workers. *Compensation and Benefits Review*, 27(4), 55-62. <https://doi.org/10.1177/088636879502700409>
- Lucia, A. D., & Lepsinger, R. (1999). The art and science of competency models: Pinpointing critical success factors in organizations. San Francisco: Jossey-Bass.
- Mann, F. C. (1965). Toward an understanding of the leadership role in formal organization. In R. Dubin, G. C. Homans, F. C. Mann, & D. C. Miller (Eds.), *Leadership and productivity: Some facts of industrial life* (pp. 44-78). San Francisco: Chandler.
- Mansfield, R. S. (1996). Building competency models: approaches for HR professionals. *Human Resource Management*, 35, 7-18. [https://doi.org/10.1002/\(SICI\)1099-050X\(199621\)35:1<7::AID-HRM1>3.0.CO;2-2](https://doi.org/10.1002/(SICI)1099-050X(199621)35:1<7::AID-HRM1>3.0.CO;2-2)
- McCall, M. W., & Lombardo, M. M. (1983). *Off the track: Why and how successful executives get derailed*. Greensboro, NC: Center for Creative Leadership.
- McClelland, D. C. (1973). Testing for competence rather than for "intelligence." *American psychologist*, 28(1), 1-14. <https://doi.org/10.1037/h0034092>
- McClelland, D. C., & Boyatzis, R. E. (1982). Leadership motive pattern and long term success in management. *Journal of Applied Psychology*, 67, 737-743. <https://doi.org/10.1037/0021-9010.67.6.737>
- McLagan, P. A. (1983). *Models for Excellence. The Conclusions and Recommendations of the ASTD Training and Development Competency Study*. Washington, D.C.: American Society for Training and Development.
- Milkovich, T. G., & Newman, M. J. (1999). *Compensation*. N.Y.: McGraw Hill
- Mirabile, R. J. (1997). Everything you wanted to know about competency modeling. *Training and Development*, 51, 73-77.
- Motowidlo, S. J., & van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology*, 79, 475-480. <https://doi.org/10.1037/0021-9010.79.4.475>
- Nadler, Z., & Nadler, L. (2012). *Designing training programs*. Routledge.
- Nahavandi, A. (2009). *The art and science of leadership*. Pearson Prentice Hall.
- Parry, S. B. (1998). Just what is a competency? And why should you care? *Training*, 35(6), 58-64.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Posner, B. Z., & Kouzes, J. M. (1988). Development and validation of the Leadership Practices Inventory. *Educational and Psychological Measurement*, 48, 483-496. <https://doi.org/10.1177/0013164488482024>
- Roe, R. A. (2002). What Makes a Competent Psychologist? *European Psychologist*, 7, 192-202. <https://doi.org/10.1027//1016-9040.7.3.192>
- Spencer, L. M., & Spencer, S. M. (1993). *Competence at work: Models for superior performance*. New York: Wiley.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology*, 25, 35-71. <https://doi.org/10.1080/00223980.1948.9917362>
- Thang, N. N., Quang, T., & Buyens, D. (2010). The Relationship Between Training and Firm Performance: A Literature Review. *Research and Practice in Human Resource Management*, 18(1), 28-45.
- Ulrich, D., Brockbank, W., Yeung, A. K., & Lake, D. G. (1995). Human resource competencies: An empirical assessment. *Human Resource Management*, 34, 473-495. <https://doi.org/10.1002/hrm.3930340402>
- Van der Klink, M. R., & Boon, J. (2003). Competencies: The triumph of a fuzzy concept. *International Journal Human Resources Development and Management*, 3, 125-137. <https://doi.org/10.1504/IJHRDM.2003.002415>
- White, R. W. (1959). Motivation reconsidered: the concept of competence. *Psychological Review*, 66, 297-333.

<https://doi.org/10.1037/h0040934>

Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of management Review*, *14*(3), 361-384.

Zemke, R. (1982). Job Competencies: Can they Help you Design Better Training? *Training*, *19*(5), 28-31.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).