Exploring the Mediating Role of Training on the Relationship between Future Orientation and Context Performance

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Abstract
This study aimed to determine the mediating role of training (perceived trainer performance, PTP; perceived usefulness of training, PUT and perceived efficiency of training, PET) between future orientation and context performance. Questionnaire was the tool of collecting data from a sample of (210) pharmacists. The results of the study indicated that there is a positive effect of future orientation on context performance. Also, there is partial effect of the three mediator variables (perceived trainer performance, PTP; perceived usefulness of training, PUT and perceived efficiency of training, PET) on the relationship between independent and dependent variables.

Keywords: perceived trainer performance, perceived usefulness of training, perceived efficiency of training, future orientation, task performance

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1. Introduction

Nadler & Nadler [1] assert that human resource development includes training. The purpose of training is aimed at improving the performance of employees currently working and facilitates staff capability to adapt to organizational strategic planning under the new policies, procedures, etc. Training is often viewed in very polarized terms by decision-makers and often seen as a universal panacea for all problems [2,3]. Its function is to enhance the ability of staff working in organizations. Nearly all employees receive some form of training during their careers; individuals rely on training to improve their current skills and to learn new skills’ ([4], p. 828). Therefore, training for organizations is an important point for future work demand.

In the face of today's fast-changing health care industry, raising the quality of medical services is essential. From the point of view of human resources, we must strengthen the capacity of health manpower. In practice, the medical industry has begun to attach importance to the training. With these facts in mind, this study focuses on how training mediator between the future orientation and context performance and affects the output performance of medical personnel.

2. Theoretical Background and Hypotheses Development

2.1. Training (Perceived Trainer Performance, PTP; Perceived Usefulness of Training, PUT and Perceived Efficiency of Training, PET)

Training increases employee knowledge, skills and attitudes in the process to achieving organizational goals. That is, using a systematic training program to train the professional knowledge, skills and attitudes needed to develop staff to meet the requirements of their work [5]. Human resource development includes training [1]. Training is aimed to train employees, enhance their current work ability, and should coincide with organizational strategic planning. Its function is to enhance the ability of employees’ staff working. Therefore, training for organizations is an important point for future work demand. Learning areas will be more extensive for long-term plans. Training is aimed at improving the existing employee job performance [6]. When training is more focused and goal-oriented, in the short-term it is easier to see the results on job performance [7].
Accordingly, the present study suggests that enhanced employee productivity or job performance is the main purpose of learning within an enterprise. The purpose of training is to provide program objectives and organizational learning experiences and opportunities which will enhance employee's current or future job performance and improve organizational performance. As suggested by Meyer and Allen [8] and by Rhoades and Eisenberger [9], positive training experiences may well have a beneficial impact on a number of important employee attitudes and behaviors including, for example, their level of job motivation, organizational commitment and perceived organizational support. According to Kidder and Rouiller [10] these include, for example, the content of the training, the materials used, and instructor performance.

Here we focus on three key factors that most researchers consider to be central to an understanding of overall trainee satisfaction with training. These include trainees’ perceptions of the usefulness and efficiency of the training, as well as their perceptions of trainer performance. These three factors are described more fully below.

2.2. Effects of Future Orientation on Context Performance

Future orientation perspective can be dated back to 1930, the more systematic research is to 1970s, Sande [11] divided it into six dimensions, including length, level of interest, optimism, pessimism, influence and expectations, in which the length is similar to the concept of future. Moreover, future orientation is a social cognitive perspective formed by the social and cultural values, is a belief in the future of the expected target [12,13,14]. Above all, future orientation have the concept of time perspective, is a set of cognitive psychological process, individual will pay attention to possible future developments and arise longing perception, and to the process of decision making [15,16].

Future orientation is a positive personality trait [17], people will be selected based on experience future goals [18]. In other words, future orientation is an individual trait with expectations for the future, the ability to interpret and construct [19], individual imagination for the future will affect the results of his behavior [13], and future orientation is regarded as the ability of individuals to conceptualize the future.

The best time perspective of the future orientation research description is attention, studies indicate that individual height control their attention assigned to the target [15], according to different periods, individuals will transfer its attention [20].

Accordingly point of view, when individuals with a high degree of future orientation, will produce more pay attention to social cognitive, based on the assumptions discussed above, the effect of future orientation influences context performance. Hypotheses were formulated as a follows:

Hypothesis 1: Future orientation will be positively related to context performance.

2.3. The Mediating Effect of Training
(Perceived Trainer Performance, PTP; Perceived Usefulness of Training, PUT and Perceived Efficiency of Training, PET)

Training is a value transfer. It is to develop an ability of cognitive understanding, and takes into account the wishes of the Trainees learning spirit [21]; Accordingly, the present study suggests that enhanced employee productivity or job performance is the main purpose of learning within an enterprise. The purpose of training is to provide program objectives and organizational learning experiences and opportunities which will enhance employee's current or future job performance and improve organizational performance.

We focus on three key factors that most consider being central to an understanding of overall trainee satisfaction with training. These include trainees' perceptions of the usefulness and efficiency of the training, as well as their perceptions of trainer performance.

The first factor to training relates to participants’ perceptions of trainer performance. As noted by Steiner, Dobbins and Trahan ([22], p. 23), ‘trainees should perceive trainer behaviors which are directed at the factor to which they attribute their training performance as more appropriate than trainer actions directed at other factors’. Content include perceived trainer mastery of topics and choice of appropriate teaching styles and methodology, such as use of teacher directed and group activities, role plays and case studies, as well as effective time management [23]. The second factor to training relates to the perceived usefulness of the training [24,25]. Content include two main concerns. The first is concerns are participants perceive the training as providing them with the knowledge and skills and improve their efficacy within the organization [26]. The second concerns individuals’ personal growth and development and participants perceive the training as contributing to their career prospects and opportunities. The third factor to training relates to the perceived efficiency of training. It relates to the organization and the mode of operation of the course and it refers to an evaluation about regarding the physical location and administration of the course [27]. We capture these arguments in our study hypothesis. Hypotheses were formulated as a follows:

Hypothesis 2: Perceived trainer performance (PTP) will mediate the positive relationship between future orientation and context performance.

Hypothesis 3: Perceived usefulness of training (PUT) will mediate the positive relationship between future orientation and context performance.

Hypothesis 4: Perceived efficiency of training (PET) will mediate the positive relationship between future orientation and context performance.
3. Method

This study was based on a causal model which tries to explore the mediator effect of training (perceived trainer performance, PTP; perceived usefulness of training, PUT and perceived efficiency of training, PET) between future orientation and context performance in pharmacists.

3.1. Sample and Procedure

In this study, in order to avoid common method variance (CMV) [28], 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 future orientation and training questionnaire on the spot. And After six months, the workplace of the trained pharmacists' supervisor completed the context performance questionnaire on the spot. 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 210 copies of valid questionnaires were obtained. 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: 144 respondents work in hospital pharmacies, 40 in community pharmacies, 15 in clinics, 11 are pharmaceutical or biotech drug dealers, making a total of 210 people. Regarding the participants’ characteristics, 85 were male, 125 were female, with women accounting for 59.50% of the total; regarding age 92 of the respondents are between 21 and 30 years old, 52 between 31 and 40, 46 between 41 and 50, 15 between 51 and 60, and 5 are over 60 years old), The 21-30 year old group is the largest, and accounts for 43.80% of the total. As for education, the subjects can be broken down as follows: 7 bachelors (excluding) degree, 158 bachelor degrees, 41 master’s degrees, and 4 PhDs. The largest group is made of up those with a bachelor's degree, accounting for 75.20% of the total. Regarding length of experience in the field, the respondents can be broken down as follows: 105 people (1-5 years), 31 people(6-10 years), 20 people (11-15 years), 27 people (16-20 years), 14 people (21-25 years), 13 people (26 - 30 years). Exactly half of the respondents have worked in the field for in 1-5 years, accounting for 50% 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 future orientation, dependent variable is context performance and mediator variables include perceived trainer performance, perceived usefulness of training, and perceived efficiency of training. Control variables include demographic variables. Pharmacists’ work is statutory and exclusive. Regarding the topic of context performance, we used the performance scale developed by Motowidlo & Van Scotter, [29]. The context performance scale includes six items. The results of this study, according to analysis, are reliability analysis. The Cronbach’s alpha is 0.907 for context performance. When looking at future orientation, we used the developed by Gjesme [30]. The future orientation scale includes six items. The Cronbach’s alpha is 0.907 for future orientation. When looking at training, we used training scale developed by Giangreco et al., [31]. The training scale includes 13 items. The perceived trainer performance includes 5 items. The perceived usefulness of training includes 5 items. The perceived efficiency of training includes 3 items. The results of this study are reliability analysis. The overall Cronbach's α value of 0.914 is good, and the Cronbach’s alphas are 0.841, 0.907, and 0.894, for perceived trainer performance, perceived usefulness of training, and perceived efficiency of training. In terms of validity, we estimated two measurement models to verify the distinctiveness of the establishment of one-factor and three-factor models. The results of the confirmatory factor analysis (CFA) suggest that the three-factor model provides a good fit ($\chi^2(62) = 230.95, p < .001$, non-normed fit index [NNFI] = 0.94, comparative fit index [CFI] = 0.95, standardized root mean square residual [SRMR] = 0.05).
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 0.84. The age correlated positively with tenure ($r = .84$, $p < 0.001$). The age correlated positively with perceived trainer performance ($r = .14$, $p < 0.05$). All variables positively related to each other ($r = .26$--$.70$, $p < 0.001$).

4.2. Hypothesis Testing

Table 2 shows the results of hierarchical regression. We tested the hypotheses by regressing future orientation and context performance on the control variables (step 1), the main effects of future orientation (step 2), and the mediating effect of perceived trainer performance (step 3). At step 2, the main effect of future orientation has significant ($\beta = .379$, $p < .001$). Hypothesis 1 was supported.

Table 3 shows the results of hierarchical regression. We tested the hypotheses by regressing future orientation and context performance on the control variables (step 1), the main effects of future orientation (step 2), and the mediating effect of perceived trainer performance (step 3). At step 2, the main effect of future orientation on context performance has significant ($\beta = .216$, $p < .001$). At step 3, the mediating effect of perceived trainer performance on context performance has significant ($\beta = .216$, $p < .001$). Hypothesis 2 also was supported, as the strength of the beta for future orientation decreased ($\beta = .296$, $p < .001$) when perceived trainer performance was included but remained significant, demonstrating partial mediation for context performance.

Table 4 shows the results of hierarchical regression. We tested the hypotheses by regressing future orientation and context performance on the control variables (step 1), the main effects of future orientation (step 2), and the mediating effect of perceived usefulness of training (step 3). At step 2, the main effect of future orientation on context performance has significant ($\beta = .379$, $p < .001$). At step 3, the mediating effect of perceived usefulness of training on context performance has significant ($\beta = .138$, $p < .05$). Hypothesis 3 also was supported, as the strength of the beta for future orientation decreased ($\beta = .304$, $p < .001$) when perceived usefulness of training was included but remained significant, demonstrating partial mediation for context performance.

Table 5 shows the results of hierarchical regression. We tested the hypotheses by regressing future orientation and context performance on the control variables (step 1), the main effects of future orientation (step 2), and the mediating effect of perceived efficiency of training (step 3). At step 2, the main effect of future orientation on context performance has significant ($\beta = .379$, $p < .001$). At step 3, the mediating effect of perceived efficiency of training on context performance has significant ($\beta = .283$, $p < .001$). Hypothesis 4 also was supported, as the strength of the beta for future orientation decreased ($\beta = .334$, $p < .001$) when perceived efficiency of training was included but remained significant, demonstrating partial mediation for context performance.

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  | .84***|    |    |    |    |    |    |
| 3. FU     | 3.70  | 0.57  | .04  | .07 | (.85)|    |    |    |    |
| 4. PTP    | 3.83  | 0.45  | .14* | .13 | .39***| (.84)|    |    |    |
| 5. PUT    | 3.75  | 0.58  | .10  | .12 | .34***| .60***| (.91)|    |    |
| 6. PET    | 3.74  | 0.63  | .10  | .08 | .45***| .60***| .70***| (.90)|    |
| 7. CP     | 4.14  | 0.44  | .08  | .12 | .39***| .33***| .26***| .40***| (.91)|

Note. N = 210. Coefficient alphas are listed in parentheses along the diagonal. FU=future orientation, PTP = perceived trainer performance, PUT = perceived usefulness of training, PET = perceived efficiency of training, CP = context performance. * p <0.05 ** p <0.01 *** p <0.001

Table 2. Hierarchical Regression Analysis

| Variables          | Context performance |
|--------------------|---------------------|
|                     | Model 1 | Model 2 |
| Control variable    |         |         |
| age                | -.060   | -.036   |
| tenure             | .165    | .117    |
| Independent variable|         |         |
| future orientation |         | .379*** |
| R²                 | .014    | .157    |
| F                  | 1.493   | 12.812***|
| ΔR²                | .014    | .143    |
| ΔF                 | 1.493   | 34.958***|

Note. N = 210. * p <0.05 ** p <0.01 *** p <0.001
Table 3. Hierarchical Regression Analysis

| Variables                      | Context performance |       |       |       |
|-------------------------------|---------------------|-------|-------|-------|
|                               | Model 1             | Model 2 | Model 3 |
| Control variable              |                     |       |       |       |
| age                           | -.060               | -.036  | -.064 |
| tenure                        | .165                | .117   | .118  |
| Independent variable          |                     |       |       |       |
| future orientation            | .379***             |        | .296**|
| Mediator variable             |                     |       |       |       |
| perceived trainer performance | .216**              |        |       |
| R²                            | .014                | .157   | .196  |
| F                             | 1.493               | 12.812*** | 14.533*** |
| ΔR²                           | .014                | .143   | .039  |
| ΔF                            | 1.493               | 34.958*** | 9.842** |

Note. N = 210. * p < 0.05 ** p < 0.01 *** p < 0.001

Table 4. Hierarchical Regression Analysis

| Variables                      | Context performance |       |       |       |
|-------------------------------|---------------------|-------|-------|-------|
|                               | Model 1             | Model 2 | Model 3 |
| Control variable              |                     |       |       |       |
| age                           | -.060               | -.036  | -.038 |
| tenure                        | .165                | .117   | .106  |
| Independent variable          |                     |       |       |       |
| future orientation            | .379***             |        | .334**|
| Mediator variable             |                     |       |       |       |
| perceived usefulness of training | .138*            |        |       |
| R²                            | .119                | .397   | .417  |
| F                             | 1.493               | 12.812*** | 10.792*** |
| ΔR²                           | .014                | .143   | .017  |
| ΔF                            | 1.493               | 34.958*** | 4.146* |

Note. N = 210. * 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                           | -.060               | -.036  | -.073 |
| tenure                        | .165                | .117   | .134  |
| Independent variable          |                     |       |       |       |
| future orientation            | .379***             |        | .252**|
| Mediator variable             |                     |       |       |       |
| perceived efficiency of training | .283***          |        |       |
| R²                            | .014                | .157   | .221  |
| F                             | 1.493               | 12.812*** | 14.499*** |
| ΔR²                           | .014                | .163   | .063  |
| ΔF                            | 1.493               | 34.958*** | 16.641*** |

Note. N = 210. * 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, do not seem to be significant. In the main effect, however, this study found that there is a positive role of future orientation in improving context performance.

Regarding the mediator effect, the results of the study revealed that there is a significant impact (partial mediation) of perceived trainer performance, perceived usefulness of training, and perceived efficiency of training on the relationship between future orientation and context performance. The main reason is that pharmacists have
expertise and should be considered technical workers. The medical system and the work environment do not allow for any negligence. For most of the pharmacists’ work content, professional-oriented results are significantly better than experience-oriented results. Pharmacists have absolute professionalism, must focus on the work now, but also attach great importance to the future development, so when the continuing education and training at the same time, for the organization in the context of some impact. That is, training plays an important mechanism.

5.2. Contribution

First, this study proposes training, aimed at developing further insight into training perspectives as well as the mediating role of future orientation and context performance. Secondly, the main effect of the present study, regarding the future time orientation perspective is worth noting. Third, from the practical perspective, training has become an important indicator of the medical industry. The results of this study make clear that whether it is through perceived trainer performance, perceived usefulness of training, and perceived efficiency of training has a significant impact on context performance. Therefore, this study makes the following recommendations; first, in addition to strengthening the training, the practice of professional and technical 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 education and training to make them more flexible, for example, open online credit courses to enable trainee’s pharmacists to customize the selection of learning places, it should increase their learning willingness and strengthen professional and technical 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, in the scale training, the present study, although substantially complete in its efforts at sorting out training, 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 and common method variance square, 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 education and training, it is recommended that in future research projects the scholars should simultaneously use the full four-stage level.

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