Measuring Organizational Support for Training: The Establishment of the Organizational Training Support Inventory (OTSI)

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ABSTRACT

Members of the American Society of Training and Development (ASTD) served as subject matter experts in order to develop and validate the content of an instrument to measure organizational support for training. More specifically, nine members of a single urban chapter of the ASTD participated in a focus group to generate an initial instrument item list of 79 items. In the second stage of the study, 5,012 national members of the ASTD rated the relative importance of each of the original items in terms of each item’s ability to measure organizational support for training. The resulting analysis provided the basis for the 25-item Organizational Training Support Inventory (OTSI).

INTRODUCTION

Organizations are complex entities which seek to work together to achieve common goals and objectives through formalized social structures (Scott, 2003). Further, an organization can be viewed in terms of the types of resources of which it is constituted. These include financial resources, capital resources and human resources (Rothwell & Sredl, 1992). In their seminal meta-analysis in the field, Porras and Berg (1978) defined Organization Development (OD) as a “set of specific change interventions focused on people and organizational processes” (p. 250). The objective of OD is to improve organizational performance through the planned change of one or more of the organization’s resource areas: financial, capital or human. This work will focus on the human aspect of Organization Development activities, as well as implications associated with financial and capital resources.

OD comprises many elements that might be termed “functions.” Although various authors offer different perspectives on specifically what these functions might be, OD has been regarded “as a broad field that encompasses training, education, development, and career development activities” (Rothwell & Sredl, 1992, p. 9). Perhaps the most directly beneficial of these to the organization is training.

Training is the focusing of learning activities toward the attainment of individual and organizational skills required for a specific job or task (McKnight, 2005). More specifically, “extensive training” has been identified by Pfeffer (2000) as a practice employed by successful organizations. He stated that, “virtually all descriptions of high-performance management practices emphasize training, and the amount of training provided as opposed to control-oriented management systems is substantial” (p. 505).

A topic relevant to the training function of OD is perceived organizational support (POS). Eisenberger, Huntington, Hutchinson and Sowa (1986) defined POS as “people’s global beliefs about the extent to which the organization cares about their well-being and values their contributions” (p. 501). More specific to this study, POS has been linked to OD activities. In a case study of nursing staff restructuring, Burke’s (2003) findings indicated that, “POS appears to play an important role in the development of job satisfaction during organizational restructuring and downsizing” (p. 149).

Both culture and communication of an organization would be associated with perceptions of organizational support. Without the perception of those involved that the organization supports and values individual and small group contributions, OD efforts will fail to yield positive results for either the organization or the individual. Further, research has shown POS to be positively related to organizational commitment (Fuller et al, 2003).

Mowday, Porter, and Steers (1982) defined organizational commitment as the strength of an individual’s identification with and involvement in a particular organization. Commitment of employees toward the attainment of a goal or objective is paramount if success is to be achieved. Without a high perception of support from the organization, organizational members will not display levels of commitment conducive to effective organizational change (Tansky &
Moreover, training geared toward those with little or no commitment to the organization would likely be ineffective in achieving improved processes and performance for the organization.

The role of training in Organization Development will become more inclusive over time. However, to prevent failed change efforts, the establishment of the likelihood for successful change initiatives is needed. This is of paramount importance for all aspects of organizational development. Relevant to training and burnout of trainers, Waugh and Judd (2003) call for future research “to identify specific support characteristics that define an organization that values or fails to value the training function.” The usefulness for such a set of characteristics goes beyond this single function. The eventual goal of this study was to produce an instrument to measure organizational support for training. Two key issues provide grounding for the study.

Resource Allocation and Preservation

Resources (human, capital and financial) are invested into employee training and retraining at an unparalleled rate. Seventy percent of businesses provide some type of formal employee training. Employers spend between $50 and $60 billion on training annually (Frazis, Gettleman, Horrigan, & Joyce, 2000). More specifically, in 2002, organizations allocated over $54.2 billion in direct training dollars (Galvin, 2002). Additionally, it is reported that employees spend approximately 30 hours annually in employer provided training (Frazis, Gettleman, Horrigan, & Joyce, 2000). The U.S. Department of Labor estimates by the end of 2005, 75% of the workforce, roughly 90 million people, needed to be retrained. This represents a major financial capital investment in human capital by organizations.

Training transfer refers to the degree to which trainees are able to apply knowledge, skills, and attitudes gained in a training context to meet the demand of the occupation and help achieve organizational goals (Newstrom, 1984; Wexley & Latham, 1981). Comprehensive reviews of literature (Baldwin & Ford, 1988; Ford & Weissbein, 1997) indicate an increasing attention to the application of training from the classroom to the workplace. Before embarking on these training efforts, it is reasonable for organizations to have some level of assurance that the internal culture is supportive of training activities, in order to ensure sufficient transfer of training. This instrument will seek to provide that assurance.

Burnout Prevention

Because of the renewed emphasis on training, as well as new responsibilities for training such as an interest in return on investment (ROI) of training (Phillips, 1997), trainers are susceptible to burnout (Waugh & Judd, 2003). In addition, all organizational members are susceptible to burnout and its negative effects. Burnout has many negative organizational consequences, including withdrawal behaviors and/or turnover (Rhoades & Eisenberger, 2002) for all organizational members, including trainers. Further research hopes to allow organizations to utilize the Organizational Training Support Inventory (OTSI) to help predict and/or prevent trainer/employee burnout and associated negative consequences.

METHODOLOGY

Two research questions guided the instrument development process. Using deductive logic, the initial research question served an exploratory data gathering purpose. The second research question sought to validate the content of findings from the exploratory phase of the study. The results from the second research question formed the basis for the establishment of the Organizational Training Support Inventory (OTSI). These research questions, listed in deductive order, included:

1. What are the perceptions of selected ASTD members with respect to the relevant factors that indicate support for organization training?
2. To what extent does the larger ASTD membership agree or disagree with the identified categories of support and list of relevant factors that demonstrate organizational support for training?
Based on the process outlined by Smith, Milberg & Burke (1996), this study sought to complete the first stage of the instrument development and validation process. These stages involved the use of focus groups to gather exploratory data and the use of statistical analysis for the purposes of data reduction. The second and third stages were not demonstrated in the study, and will be discussed in a more comprehensive nature in Recommendations.

Two subject groups were utilized for this study. For purposes of classification, these groups were labeled as Subject Group A and Subject Group B. Both groups were comprised of members of the American Society of Training and Development. This organization’s membership was selected as the population because these subjects were likely to be highly involved in training activities that support Organization Development activities. While membership in ASTD would not be inclusive of all training and development nor Organization Development professionals, it would provide a solid foundation from which to generalize results to training-related occupations.

Subject Group A consisted of ASTD members who were initially selected randomly from the membership directory of a single urban chapter of ASTD (St. Louis). This group was selected to participate in focus groups, provided they were internal organizational training professionals, and not academic or consultant ASTD members. To prevent issues related to member availability and ability to participate in focus groups, this group was selected from a single urban chapter (St. Louis). The group was from an urbanized location to assist in increasing the likelihood of diverse backgrounds and experience. Focus groups were asked to identify elements or characteristics of organizations that were supportive of training. The Nominal Group Technique (NGT) was used as the qualitative brainstorming technique for this group. NGT involves the use of independently generated answers to questions, which form the basis of group discussion and rating later in the process.

Subject Group B consisted of those individuals who completed an evaluation of the initial instrument’s item list. All ASTD members who had email addresses listed from the ASTD website were invited to complete this evaluation. The measures of reliability were based on the consistency with which individual ASTD members rated items from the initial instrument item list as “very important” or “extremely important.” The scale for initial instrument items asked respondents to assign a Likert-type rating scale value (provided below) to each item from the instrument item list.

5 – Extremely Important
4 – Very Important
3 – Somewhat Important
2 – Less Important
1 – Not Important
0 – Does Not Apply

Based on this scale, a relative ranking of the importance and validity of each item was determined to provide a basis for agreement or disagreement between Subject Group A (focus group) and Subject Group B (larger ASTD population). A final version of the instrument was created based on results of comparative descriptive analysis.

RESULTS

The present study sought to complete the first stage of the instrument development and validation process. More specifically, the research questions constructed a framework to guide the present research through the initial stage of the instrument development and validation process.

The following sections of the current research present findings to each of these questions, respectively.

Research Question One asked “What are the perceptions of selected ASTD members with respect to the relevant factors that indicate support for organization training?” This question correlated to stage one of the instrument development and validation process. To this question, a focus group was conducted with a single urban chapter of the American Society of Training and Development. For coding purposes, this group was labeled Subject Group A.
A total of nine ASTD members participated in the exploratory stage of the study (focus group). Four were female and five were male. The focus group was asked to identify elements or characteristics of organizations that were supportive of training. The Nominal Group Technique (NGT) was used as the qualitative brainstorming technique for this group. NGT involves the use of independently generated answers to questions, which form the basis of group discussion and rating later in the process. Answers were recorded by the researcher and verified with focus group participants using the Nominal Group Technique. More specifically, each response was written down on a chart, acknowledged and discussed by the group. Table 1 indicated responses provided by Subject Group A.

**Table 1. Focus Group Responses**

**Characteristics of organizations that support training:**

- Organizations that are industry leaders.
- Organizations with more than 1000 employees.
- Organizations with a published vision statement.
- Organizations that invest in newer technologies (computer systems, robotics, ergonomic work stations, etc.)
- Organizations with technical products.
- Organizations that reimburse educational ventures of their employees.
- Organizations that encourage, recognize and reward individuals for engaging in personal development.
- Organizations in which employees proactively take responsibility for their own career development.
- Organizations that provide internal and external resources for employee development.
- Organizations in which the Training or Organization Development Manager is part of the strategic planning process.
- Organizations which view selection, training, development and retention of employees as a key strategic objective.
- Organizations having internship agreements with local colleges or universities.
- Organizations where the training budget is controlled by HR or Training Manager.
- Organizations with flexible union contracts.
- Organizations with well educated management but uneducated average workers.
- Organizations that outsource management hiring.
- Organizations with a focus on teamwork.
- Organizations which are financially strong.
- Organizations in which customer service is emphasized.
- Organizations in which quality is stressed.
- Organizations in which job satisfaction is stressed.
- Organizations that provide mentoring relationships.
- Organizations which utilize a learning or enterprise management system.
- Organizations that have measurable goals originating from a strategic plan.
- Organizations that utilize all four levels of Kirkpatrick’s model in evaluating training.
- Organizations which are knowledge-based.
- Organizations with a focus on return on investment (ROI).
- Organizations that avoid trainer burnout.
- Organizations that have performance management systems in place.
- Organizations with adequate technological resources.
- Organizations which view a well trained workforce as a competitive advantage.
- Organizations that choose not to reduce training or training budgets during financially trying times.
- Organizations that integrate the training function into information loop.
- Organizations that embrace change as a part of the culture.
- Organizations with a defined learning strategy.
- Organizations that outsource elements of the training function.
- Organizations that work to address various learning styles in training.
- Organizations that base training on results from training needs analysis reports.
- Organizations whose training programs are driven by business needs.
- Organizations which provide accessibility to learning resources for employees.
- Organizations with personnel dedicated to the training function.
- Organizations willing to provide subject matter experts (SMEs) throughout the training process.
- Organizations whose budgets have training components.
Organizations whose trainers/training department is made up of those promoted internally.
Organizations with a succession plan in place.
Organizations whose training function is represented in upper management.

Characteristics of organizations that do not support training:

- Organizations that do not emphasize support or reimburse educational ventures for employees.
- Organizations which are not supportive of upgrades to computer systems.
- Organizations in which management is hired from within the industry or from internal ranks only.
- Organizations with fewer than 300 employees.
- Organizations with alternating employee work schedules.
- Organizations which are financially weak.
- Organizations owned by individuals without higher education.
- Organizations that view employees as equipment.
- Organizations with high incidents of on the job injuries or accidents.
- Organizations where average employees has masters or above education level.
- Organizations with competitive internal cultures.
- Organizations that do not emphasize customer relations.
- Organizations with mature products or production methods.
- Organizations in which senior management believe they can “hire talent when needed.”
- Organizations in which training is not reinforced or modeled on the job.
- Organizations that provide training as a reward or vacation.
- Organizations that fail to properly follow through after implementing training.
- Organizations that fail to tie performance improvement to improved business results in measurable terms.
- Organizations with weak or poor hiring practices.
- Organizations that have little or no product innovation.
- Organizations with a “do it on your own time” attitude regarding training.
- Organizations that train reactively versus proactively.
- Organizations with little or no innovative thinking from senior management.
- Organizations with a lack of OJT support after initial training.
- Organizations that use training and development activities to solve problems not related to training and development.
- Organizations with understaffed training functions.
- Organizations with a lack of proper communication channels.
- Organizations whose trainees are not motivated.
- Organizations whose training curriculums are not competency-based.
- Organizations whose training has little or no connection to upward mobility.
- Organizations with low skilled workers.
- Organizations that exist in poor economic environments.
- Organizations whose labor and management have incompatible goals.

Research Question Two asked “to what extent does the larger ASTD membership agree or disagree with the identified categories of support and list of relevant factors that demonstrate organizational support for training?” To address this question, descriptive frequencies for each item not listed in the “Other” category were computed based on information obtained from Subject Group B.

A total of 5,012 out ASTD members (Subject Group B) completed or attempted to complete the online questionnaire, which asked them to rate the relative importance of each item from the initial instrument item list in determining the extent to which organizations support or do not support training. Of those 5,012, 62.1% were female (3,110) and 37.9% were male (1,902). The majority of respondents held graduate degrees (54%). A majority of respondents (3,650) identified their organization type as “Corporate” (72.8%).

The ratings of the items were requested in an effort to establish the content validity of the items from the initial focus groups (Subject Group B). Based upon rater agreement (70% or better among those rating items as “very important” or “extremely important”), the initial OTSI is listed at the conclusion of this article.
CONCLUSIONS

The Organizational Training Support Inventory (OTSI) appears at the conclusion of this article. The instrument is the result of a multi-phase process, each with its own specific conclusions that collectively represent the process of the development and content validation of the OTSI.

The standard instrument to measure perceived organizational support is the Survey of Perceived Organizational Support (Eisenberger, et al., 1986). The SPOS is the first instrument of its kind in the field, with established reliability, validity and acceptance. The scale of the SPOS is a seven point Likert-type scale. Because of the similar scope of the OTSI and the SPOS, an identical scale was adopted for the OTSI.

The final instrument item list was converted from statements to inventory items through the changing of prefix statements. For example, a statement that began with “An organization in which…” might have been converted to “My organization…” Through this process, the instrument was finalized into a 25-item inventory. Three of the 25 items were based on non-supportive items and the other 22 items were based on statements indicating support. Based on these, the scoring range for the instrument was tabulated to be a high score of 132 (indicating an organization that is highly supportive of training) to a low score of -18 (meaning the organization is not at all supportive of training). The score is referred to as the Training Support Index (TSI).

RECOMMENDATIONS

The creation and validation of an instrument is a specific process, with a specific desired product or outcome. In the present research, the development and subsequent content validation of the OTSI sought to identify and validate factors associated with organizational support for training. The application of relevant findings provided the applied and theoretical basis for the final version of the OTSI. The following paragraphs offer recommendations for continued research and theory relevant to the OTSI:

1. The population for the present study was the American Society for Training and Development (ASTD). While this group provided relevant subject matter experts in the field of training, the OTSI should be cross-validated with other professional organizations and within additional circles. For example, the International Society for Performance Improvement might also provide relevant insights into organizational support for training.
2. An initial review of differences in perceptions based on demographic characteristics of respondents revealed two statistically significant findings. The differences were for those who had less than one year of experiences in a training and development occupation and also for those who had no college experience. A complete review and discussion of these initial differences should be investigated further in future research.
3. The present research focused on stage one of the instrument development and validation process (Smith et al., 1996). Future research should explore stage two of the process. More specifically, the initial instrument should be administered so that both an exploratory and confirmatory factor analysis can be completed. Further, stage two of the process should involve a process to clarify specific items and compare alternative models of the construct or constructs measured in the OTSI.
4. In addition to the completed stage one study, and subsequent studies in stage two of the instrument development and validation process, stage three procedures should also be completed. More specifically, based on findings in the stage two factor analysis, internal validity should be calculated for the OTSI. Further, measures of construct, concurrent and nomological validity should be conducted. By establishing the predictive qualities of the instrument, the application of the present research could be integrated into various research purposes (scientific, research and development, applied).
5. Stage three should also consist of a separate study that assesses the instrument’s reliability. According to Smith, et. al (1996), an additional confirmatory factor analysis should explore both internal consistency measures as well as the test-retest method for reliability coefficients.
6. Every valid instrument should possess as much generalizability as is possible. Future studies should explore and extend the present and subsequent studies through the use of confirmatory factor analyses on multiple samples. Through extensive and prolific studies, increased generalizability should be an ongoing process. By assessing the instrument in a continuous manner and in as many types of organizations as possible, the increased generalizability will make the instrument a more universal tool in the field of training and development.

REFERENCES


**APPENDIX: ORGANIZATIONAL TRAINING SUPPORT INVENTORY**

Listed below are statements that represent possible opinions that you may have about your company and its support of training related activities. Please indicate the degree of your agreement or disagreement with each statement by listing the number that best represents your point of view about each statement. When you have completed all 25 items, you can follow instructions on the reverse page to score the OTSI and yield your Training Support Index (TSI). Please choose from the following answers:
1. My organization is an industry leader.

2. My organization is one in which employees proactively take responsibility for their own career development.

3. My organization views the selection, training, development and retention of employees as a key strategic objective.

4. My organization views a well trained workforce as a competitive advantage.

5. My organization has a defined learning strategy.

6. My organization’s training programs are driven by business needs.

7. My organization reimburses educational ventures of employees.

8. My organization’s budget has training components.

9. My organization has measurable goals originating from a strategic plan.

10. My organization encourages, recognizes, and rewards individuals for engaging in personal development.

11. My organization provides internal and external resources for employee development.

12. My organization provides mentoring relationships.

13. My organization provides accessibility to learning resources for employees.

14. My organization lacks on-the-job training support after initial training.

15. My organization invests in newer technologies (computer systems, robotics, ergonomic work stations, etc.)

16. My organization has personnel dedicated to the training function.

17. My organization provides subject matter experts (SMEs) throughout the training process.

18. My organization emphasizes customer service.

19. My organization stresses quality.

20. My organization stresses job satisfaction.

21. My organization embraces change as a part of the culture.

22. My organization views employees as equipment.

23. My organization works to address various learning styles in training.

24. My organization bases training on results from training needs analysis reports.

25. My organization does not reinforce or model training on the job.

Scoring the OTSI

To compute your score, which is referred to as a Training Support Index (TSI), follow the steps below:

2. Add your scores for items 14, 22, and 25.
3. Complete the following formula:

   \[ \text{TSI} = (\text{Total from Step 1}) - (\text{Total from Step 2}) \]