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Research Update: Pay for Skills,
Knowledge, and Competencies

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RESEARCH UPDATE: PAY FOR SKILLS, KNOWLEDGE, AND COMPETENCIES

Research interest in pay for skills, knowledge, and competencies (SKC) has continued over the past three decades. The topic has never generated a large volume of research but has never faded from view. Here, we focus on the key findings of research published since 2000. We identified over 30 research studies published during this time, a level of publication that we found surprising and encouraging.

Definitions

Skills are expertise used in performing tasks. *Knowledge* is information used in performing tasks. *Competencies* are general skills or traits needed to perform tasks, often in multiple roles. SKC pay plans provide rewards only after an employee demonstrates the acquisition of skills, knowledge, or competencies. By contrast, common job-based pay systems are based on job title, independent of proficiency. Typically, SKC plans for nonexempt employees are termed skill-based pay, while plans for exempt professionals or managers are termed pay for competencies. Skill-based pay systems are common in manufacturing. Competency pay systems are common for teachers and IT professionals.

Overviews of the Literature

For those interested in a more comprehensive discussion of pay for SKC, we recommend Ledford and Heneman, 2011, Skill-based Pay, a SHRM publication in the SIOP Science Series, and Ledford, 2015, "Paying for skills, knowledge, and competencies," in Berger and Berger, The Compensation Handbook (6th Edition),

McGraw-Hill. Many other publications discuss variations in pay plan design, the rationale for these plans, positive and negative effects, and keys to successful implementations.

We summarize the findings of research since 2000 in four main conclusions.

1. Studies continue to show positive effects on employee attitudes and performance.

The primary topics of research prior to 2000 concerned details of how the pay plans worked, effects on the organization and individuals on the plan, and factors associated with success or failure. The evidence suggests that these plans have a high success rate but that causal patterns are complex. An important study in this tradition is Mitra, Gupta, Shaw, "A comparative examination of traditional and skill-based pay plans, "Journal of Managerial Psychology, 2009, 26:278-296. This study found that skill-based pay plans were associated with higher workforce flexibility, employee attitudes, and productivity, as well as lower turnover and absenteeism. In addition, Al-Waqfi and Agarwal found in a large Canadian company that plan characteristics (such as employee involvement, understanding, and training and advancement opportunities) were associated with employee commitment and an expanded role in the organization ("Determinants of role orientation and organizational commitment under skill-based pay: a path model." International Journal of Human Resources Development and Management, 2006, 6:4-21). A similar study in a Nigerian company found similar results (Agwu and Emeti, 2013,"Perception survey of skill-based pay system and employees performance in Dormanlong Engineering Company Limited Port-Harcourt,"

International Journal of Business and Management, 8:11-21). Finally, a New Zealand study found that skill-based pay was associated with lower employee turnover (Guthrie, J. P., 2000, "Alternative pay practice and employee turnover: An organizational economics perspective," Group & Organization Management, 25:419-439).

2. **Recent studies examine more narrow questions.**

Many newer studies focus on one dimension of SKC pay design or one type of employee attitude or behavior resulting from such plans. A five-year study found that SKC pay plans result in increased skill growth and maintenance, and receiving pay for increased learning reinforces the pattern and predicts future skill growth (Dierdorff and Surface, 2008, "If you pay for skills will they learn?" Journal of Management, 34:721-743). Jenkins and Klarsfeld examined how industry dynamics, among other factors, influenced the degree to which employees were involved in plan design and skill assessment (Jenkins and Klarsfeld, 2002, "Understanding 'individualization' in human resource management: The case of 'skill-based pay' in France," International Journal of Human Resource Management, 13(1): 198-211).   Finally, multiple studies examine the use of SKC for specific populations, including government workers, teachers, and IT groups.

3. **Research shows that SKC pay plans can survive for many years.**

Several studies have examined the longevity and evolution of SKC pay. Shaw, Gupta, Mitra, and Ledford ("Success and survival of skill-based pay plans," Journal of Management, 2005, 31:28-49) conducted a longitudinal study of 97 skill-based pay plans. The study used two types of predictor variables (pay plan characteristics and

organizational characteristics) to predict plan survival and plan success. Over 60% of the plans survived for the seven years of study.

Three articles report multi-case studies. Ledford (WorldatWork Journal, 2008, 17:1, 6-17) reported on factors affecting the long-term success of skill-based pay, based on a set of nine case studies in manufacturing plants. Eight plans succeeded while one was discontinued. Plan designs were highly customized and were periodically redesigned. Zingheim and Schuster conducted two multiple-case studies. The first ("Competencies replacing jobs as the compensation/ HR foundation," WorldatWork Journal, 2009, 18:3 6-19) investigated 18 organizations that paid for competencies. Most plans included only part of the workforce, most often professionals. Their second study ("Skill pay successes: Managing the challenges," WorldatWork Journal, 2012, 21:3, 29-41) examined 15 plans that were between 2-10 years old. Senior executives viewed the plans as successful, but it typically took 1-2 years to "get past the toothache" of implementation.

Overall, these studies indicate that SKC pay plans require considerable ongoing investment by leadership to keep the plans current and to address emerging challenges. The characteristics of the plans, their fit with their organizational context, and the ability of the plan to meet business needs all influence success and survival. The patterns of causation are complex and, to some degree, are organization-specific. Even successful plans require periodic redesign.

4. Bonuses for SKC have received little research attention.

Most pay for SKC research concerns base pay systems. However, there are

many advantages of bonus-oriented plans. Bonus plans can be extremely flexible and adaptable. They are less subject to many problems of base pay plans, including plan maintenance, skill obsolescence, overpayment versus the market, and adaptation to changing technology and business needs. Many base pay system failures are in the technology sector, where skill requirements evolve very quickly and where bonus systems might be more suitable. However, there is almost no research on SKC bonus systems. The only studies we found were obscure government publications about military pay, which heavily uses lucrative enlistment and reenlistment bonuses to attract and retain specialized talent in areas of need. For example, physicians, Special Forces personnel, pilots, and mechanics can receive bonuses as high as $200,000 for enlisting or reenlisting. Government research has found that reenlistment bonuses work better than enlistment bonuses, perhaps because it is hard to find specialized military skills in the general labor market. (For example, see Congressional Budget Office, June 2007, Evaluating Military Compensation, Pub. No. 2665.)

Conclusion

Pay for skills, knowledge, and competencies offers significant benefits but is not for the faint of heart. These pay plans require more effort to develop and maintain than traditional pay plans because they are highly customized and require periodic redesign. As the context changes, the plan must evolve. The growing knowledge about these plans is helpful in anticipating problems and addressing typical challenges.

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