TOWARD A DYNAMIC PERSPECTIVE OF PERSON-ENVIRONMENT FIT

Tomoki Sekiguchi

Abstract

The framework of person-environment (P-E) fit has its long history. However, the P-E fit perspective is sometimes criticized as static for representing the dynamic interaction of the person and the situation. Despite such criticism, some researchers have proposed more dynamic models of P-E fit. This paper introduces some of the P-E fit models that are based on the dynamic perspective and suggests future research directions toward better understanding of the dynamic process of P-E fit.

INTRODUCTION

The concept of person-environment (P-E) fit basically indicates that alignment between characteristics of people and their environments results in positive outcomes for both individuals and organizations (e.g., Schneider, Smith & Goldstein, 2000; Ostroff, Shin & Feiberg, 2002).

The history of P-E fit can be traced back to Persons' (1909) congruence concept in vocational guidance (Spokane, Meir & Catalano, 2000). It is also largely affected by Lewin's (1938) proposition that behavior is a function of the person and the environment. As reviewed in various articles (e.g., Edwards, 1991; Kristof, 1996, Sekiguchi, 2004), several distinct constructs have evolved from the P-E fit concept, including an individual fit with job (P-J fit), group (P-G fit), organization (P-O fit), and vocation or occupation (P-V fit). Different ways to conceptualize P-E fit include the needs-supplies and demand-abilities distinction (i.e., fit between individual needs and environmental supplies vs. fit between environmental demands and individual abilities) (Muchinsky & Monahan, 1987), and the actual and perceived distinction (i.e., actual or objective fit vs. perceived or subjective fit) (Kristof, 1996).

P-E fit framework has been prevalent in various research fields. For example, P-E fit paradigm has been the dominant research model in vocational psychology (Spokane et al., 2000). In the management field, P-J fit has been the traditional approach on employee recruitment and selection research, and there is a burgeoning interest in P-O fit among management researchers in recent years (Edwards, 1991; Kristof, 1996).

A quite large number of empirical studies based on these concepts have been conducted and such enthusiasm for empirical investigation continues. However, despite such a large amount of theoretical and empirical work, the perspective of P-E fit is sometimes criticized as a static view. For example, most P-E fit models focus on the relatively stable aspects of the person and the environment. In empirical studies, P-E fit is typically only assessed at one point of time, either when the selection or job choice decisions is being made or later at some point during the person's organizational tenure (Spokane, Meir & Catalano, 2000; Ostroff, Shin & Feinberg,

2002).

However, not all of the P-E fit models are static. Actually, some researchers have proposed the models of P-E fit that are essentially dynamic. The purpose of this paper is to introduce some of the dynamic P-E fit models and suggest future research directions toward better understanding of the dynamic nature of P-E fit.

STATIC VS. DYNAMIC VIEW OF P-E FIT

One of the classic models of P-E fit is Holland's P-E fit theory (Holland, 1959). Holland proposes a theory of vocational choice based on the concept of congruence between the individual and the occupational environment. According to Holland, both individuals and occupational environments are characterized by the RIASEC typology (realistic, investigative, artistic, social, enterprising, and conventional). Interest inventories can be used to determine an individual's RIASEC classification (Holland, 1959). An environment can be defined in terms of the distribution of types present in it because the environment is a function of career interests and nature of its members. Individuals seek out vocations that have a career environment that matches their own interests. Thus, high P-E fit or congruence results in satisfaction, vocational stability, and achievement. In contrast, low P-E fit is likely to result in dissatisfaction and ultimately leaving that occupation.

Although Holland's P-E fit theory is intuitively sensible, and accumulation of the empirical studies suggests that Holland's theory is somewhat valid (Tinsley, 2000), it is often pointed out that Holland's model is rather static than dynamic (e.g., Ostroff, et al, 2002). Therefore, in order to better understand the dynamic interaction of the person and the environment, we should consider developing more dynamic models of P-E fit in which both individuals and environments change over time.

Whether a good fit today will be a good fit tomorrow depends on the stability of the variables on which matches are made (Muchinsky & Monahan, 1987). Some characteristics of the person and the environment are more stable but other characteristics may be more changeable. For example, personality and values are often used in conceptualizing P-E fit. Although both personality and values are considered relatively stable, values are less stable than personality and susceptible to the variety of changes in society and the influences of new environments (Ryan & Kristof-Brown, 2003). Therefore, while fit in terms of personality similarity may be relatively stable, fit in terms of value congruence may change over time.

In the following sections, I introduce some of the dynamic P-E fit models. First, I introduce two dynamic P-E fit models from career theory: Theory of work adjustment (TWA) and the general model of achieving fit during early career. Career theory focuses on individual development through occupation. Therefore, these dynamic P-E fit models from career theory try to illustrate how individuals choose environments that create good fit and how resultant P-E fit or misfit affects individual affective and behavioral outcomes in their career. Second, I introduce two dynamic P-E fit models on group and organizational behavior: Attraction-selction-attrition (ASA) framework and the model of the relationship among culture, fit and change. These models focus not only on individual behavior but also on group or organizational behavior. Therefore, predictions in these models include group or organizational as well as individual

outcomes. Finally, I introduce two models that focus on a dynamic interplay between two or more different types of P-E fit: The role of socialization in actual and perceived fit and the model of the changing effects of surface- and deep-level of fit. These models are also important considering the complex and multidimensional nature of the P-E fit construct (Sekiguchi, 2004). In the final section, I briefly suggest future research directions for better understanding of P-E fit from a dynamic perspective.

DYNAMIC P-E FIT MODELS IN CAREER THEORY

Theory of work adjustment (TWA)

As stated in the introduction section, P-E fit has been the dominant research paradigm in career theory, especially in vocational choice. While Holland's model appears to be relatively static, the theory of work adjustment (TWA), which is also a classic model in career theory, appears to focus on the dynamic P-E fit process. TWA focuses on the concept of correspondence, which is similar to the concept of fit, between the individual and the environment (Bradley, Arthur & George, 2002). Specifically, this theory emphasizes the process through which individuals attempt to obtain and maintain correspondence with their environments, because correspondence fluctuates over time due to changes in the individual and the environment (Dawis, Lofquist, & Weiss, 1968). Individuals change themselves or their environments to achieve fit, and environments or jobs may change over time, resulting in increased or decreased correspondence between the individual and the environment (Bradley, et al., 2002).

Two types of correspondence are identified by the TWA: satisfactoriness and satisfaction. Satisfactoriness occurs when individual abilities match duties and requirements of the job, and satisfaction occurs when individual needs and desires match the rewards offered by the job. The two types of congruence that result in satisfactoriness and satisfaction in TWA can be equated with demands-abilities fit and needs-supplies fit respectively.

Like Holland's RIASEC typology, the TWA theorizes four different personality styles, which describe an individual's typical manner of interacting with the environment. *Celerity* refers to the speed with which the individual typically initiates interactions with the work environment. It is thought to relate to the individual's tolerance for a lack of correspondence. *Pace* refers to the level of effort exerted in interactions. Some individuals are thought to devote more effort than others in obtaining correspondence. *Rhythm* refers to the pattern (i.e., steady or erratic) or effort expended. Some people consistently strive for correspondence with their environment, while others tend to go through cyclical periods of effort aimed at increasing correspondence. Finally, *endurance* refers to the lengths of time the individuals commit to the interaction. The TWA assumes that the four personality styles are relatively stable, representing an individual's tendency to interact with the environment in a relatively consistent way over time (Bradley et al., 2002).

Compared with Holland's theory, which appears to assume that both individuals and environments are relatively stable, TWA reflects more dynamic and ongoing processes through which the individual and the environment interplay with each other. This approach is unique in terms of trying to gain a handle on the unfolding nature of careers and individual differences that might influence basic processes of career adjustment (Bradley, et al, 2002: 42).

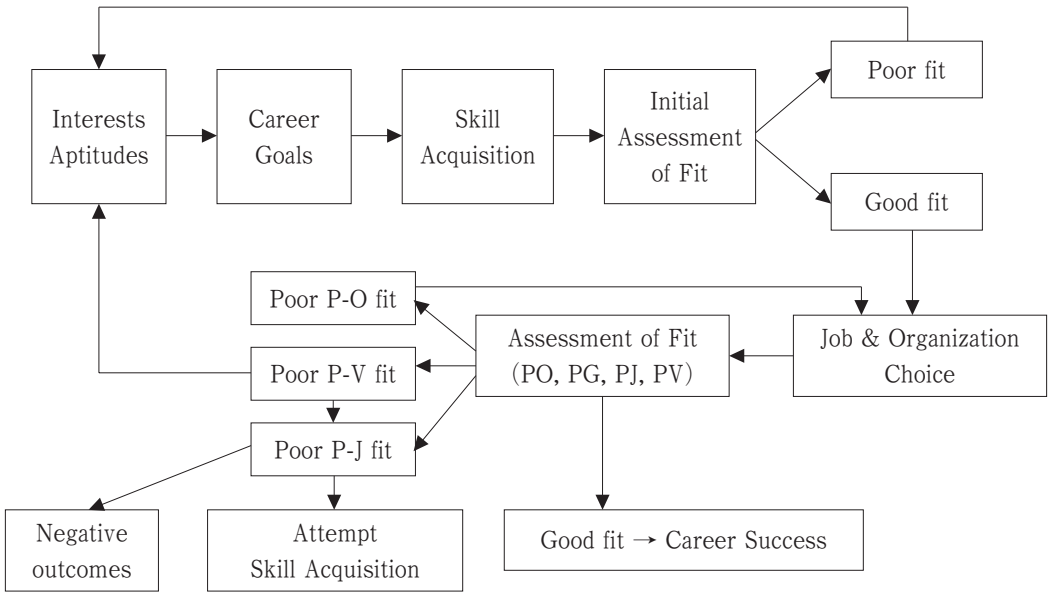
Although the dynamic P-E fit process proposed in the TWA may have many theoretical and practical implications, it has not received adequate research attention and its influence in career literature appears to have waned considerably (Bradley, et al, 2002; Tinsley, 2000).

General model of achieving fit during early career

Based on the view that P-E fit reflects both developmental and dynamic processes, Ostoroff, et al. (2002) theorize a general model for achieving P-E fit during young adulthood, reflecting the dynamic and reciprocal relationships among interests, abilities, career goals, career choice, and skill acquisition (See Figure 1). Because achieving fit during early career is a kind of the goal striving process through individual development, this model indicates that the skill acquisition process is ultimately related to fit along a number of dimensions (e.g., organization, group, job, and occupation).

The basic mechanism proposed in their model is that, during the career development, individuals are likely to reassess and reevaluate their career goals continuously as they learn more and acquire more skills. Positive responses from the environment tend to result in greater goal persistence, persistence in career choice, and relevant skill acquisition, whereas negative reactions will likely entail a reassessment and potential shifting of goals and career choices.

Figure 1: General model of achieving fit during early career



Note. Adapted from Ostoroff, et al. (2002) with modification.

At the very first stages of career development, such as in school, interests help young individuals identify career goals in terms of liked or disliked activities, while abilities determine the range of available means for reaching those goals. That is, interests are used in the initial assessment of needs-supplies fit while abilities are used in the initial assessment of demands-abilities fit. If the initial assessment of fit is poor in term of either needs-supplies or demands-

abilities fit, reevaluation is likely, and choosing another occupation is warranted. If the initial assessment of fit is positive during skill acquisition, individuals eventually seek out jobs that also fit their personalities, values, and specific sets of competencies.

An individual's initial choice of occupation, job, and organization does not always result in good fit in every aspect, which influences career transitions. Depending on the type of dimensions in which individuals recognize poor fit, they may change jobs, organizations, or occupations. For example, if P-O fit is poor, individuals are likely to attempt to change organizations. If P-G fit is poor, individuals may be motivated to seek transfers or relocating. If P-J fit is low but P-V fit is high, they may attempt to change to a job better suited to their skills or attempt to acquire additional training or skills to enhance P-J fit. If P-J fit and P-V fit are both low, individuals may be prompted to begin the process of occupational choice again. Ultimately, if they achieve a good fit for many aspect of the environments, they may experience objective and subjective career successes (e.g., satisfaction, pay and promotion).

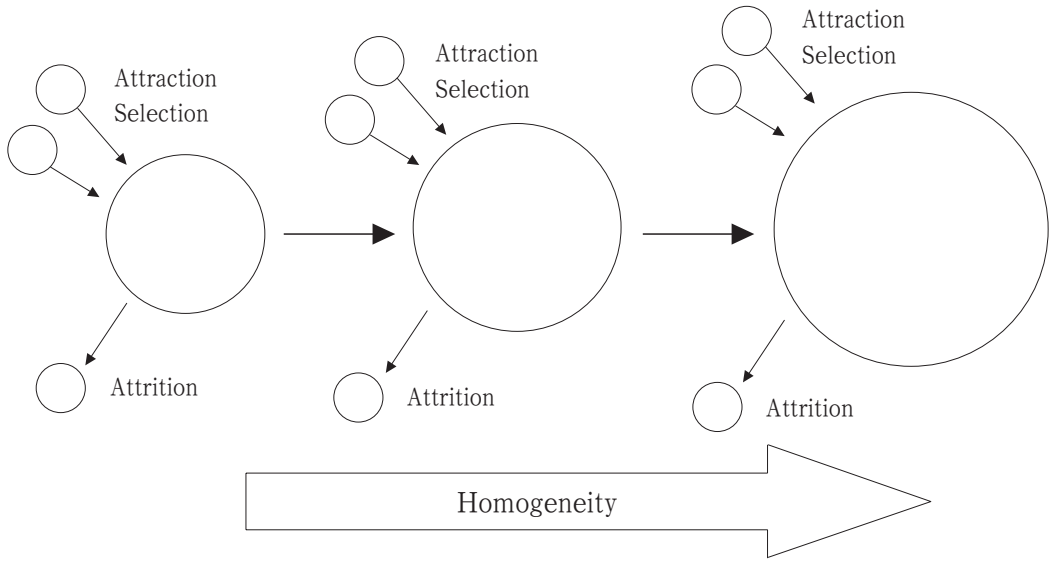
In their model, skill acquisition plays an important role in this dynamic and developmental P-E fit process because acquiring new skills reflects the change of individual abilities, which also changes the relationship between individual abilities and environmental demands.

DYNAMIC P-E FIT MODELS ON GROUP AND ORGANIZATIONAL BEHAVIOR

Attraction-selection-attrition (ASA) framework

While the dynamic P-E fit models in career theory primarily focus on individuals, the attraction-selection-attrition (ASA) framework, originally proposed by Schneider (1987), considers the dynamic process that focuses on both individuals and organizations. That is, P-E fit models in career theory are based on the interactional psychology, which suggests that individual behavior is a function of the person and the environment (e.g., Lewin, 1938). Interactinal psychology also views the situation as something persons either must fit to be effective (satisfied, committed, productive) or something that moderates the relationship between some individual characteristics and individual effectiveness. On the other hand, the ASA framework proposes that persons make environments. That is, the ASA framework places primary causation for organizational behavior on the collective characteristics of the people (e.g., personality, attitudes, and values) in the organization. Therefore, the ASA framework is aimed at predicting and understanding organizational behavior (Schneider, Goldstein & Smith 1995). The framework proposes that the outcome of three interrelated dynamic processes, attraction-selection-attrition, determines the kinds of people in an organization, which consequently defines the nature of the organization, its structures, processes, and culture. The attraction process concerns the fact that people's preferences for particular organizations are based upon an implicit estimate of the congruence of their own personal characteristics and the attributes of potential work organizations. Next, the organizations use formal and informal selection procedures in the recruitment and hiring of people in such a way that they select people based on the attributes the organization desires. Finally, the attrition process occurs such that people will leave an organization they do not fit. This attraction-selection-attrition is the ongoing cycle that reflects the way people make the place. Through the ASA cycle, founders and the members of top management have long-term effects on the nature of the organization, and over time, the

Figure 2: Attraction-selection-attrition (ASA) cycle



organization becomes homogeneous with regard to person types (See Figure 2).

P-E fit framework generally suggests that a high level of fit results in positive individual outcomes (e.g., satisfaction, commitment, performance). However, the ASA model suggests that, over time, the tendency for organizations to become homogeneous with regard to person types can be dangerous for long-term organizational effectiveness. Because of the high level of homogeneity, organizations may not be able to change themselves when environmental demands and conditions for organizational competitiveness are changing.

However, the negative organizational outcomes predicted by the ASA model may not necessarily mean that the high levels of P-E fit in general is not good for organizations. For example, complementary fit as the match between abilities and environmental requirements may be always good for organizations (Ryan & Kristof-Brown, 2003). Good fit on goals may also always result in positive organizational outcomes (Schneider et al., 2000). P-O fit as value or personality congruence may be beneficial organizations at least for a short-term through a variety of positive individual effects (Chatman, 1991).

Good fit may be more problematic in situations such as crisis and in rapidly changing environment where a diversity of viewpoints is important (Chatman, 1989) because increasing homogeneity may decrease innovative and responsive capability of the organization. However, Ryan and Kristof-Brown argue that when the trait in P-E fit has to do with flexibility, openness, or adaptability, good P-E fit may actually improve organizational responsiveness and result in positive consequences for organizations.

Relationship among culture, fit and change

One of the interesting research questions is the effect of P-E misfit for individuals and organizations. The ASA framework predicts that if P-E fit is poor, such individuals are likely to

leave the organization. However, exit may not be the only choice for individuals with P-E misfit. If the newcomers who have poor fit with the group or organization choose not to leave, there may be interactions, typically some conflicts or negotiations, between the newcomers and the members who represent the dominant organizational characteristics. Chatman & Barsade's (1995) study that focuses on the relationship among culture, fit, and change has implications for this research question.

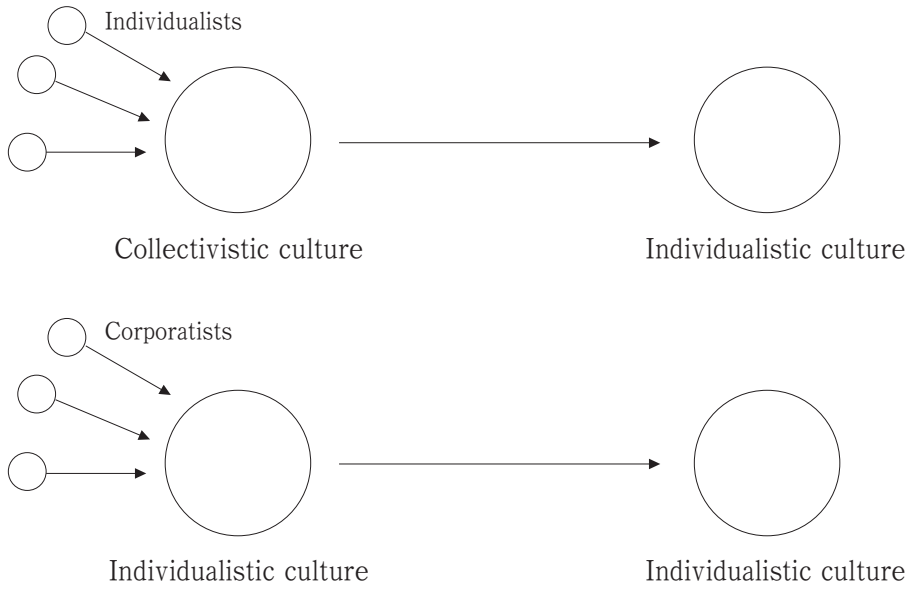
In their study using simulated organizational settings, Chatman and Barsade created collectivistic and individualistic cultural values and examined how people with individualistic or cooperative dispositions behave in such organizational settings. They found that cooperative individuals behaved more cooperatively when they worked in an experimentally induced collectivistic culture. Their study also demonstrated that cooperative individuals tended to vary their behavior more depending on whether or not they were in an individualistic or collectivistic culture, while more individualistic individuals tended to be less responsive to cultural norms. Personality research suggests that cooperative people are more likely to adjust their behavior to suit the situations in which they find themselves. Therefore, compared with individualistic people, they are more concerned about finding in and are more willing to go along with others (John, 1990; Chatman & Barsade, 1995).

The results from Chatman and Barsade's study suggest that individualistic culture, if it is created by recruiting individualistic people, is more robust, at least in the United States (Pfeffer, 1998: 39). That is because cooperative people will change their behavior more to conform to the individualistic culture, which will become even more individualistic in its orientation. But since individualists conform less to social pressure, moving from an individualistic to collectivistic orientation is much less likely.

Findings from Chatman and Barsade's study have also implications for organizational or group change. If people with individualistic disposition join the organization or group with collectivistic culture, they are less likely to change their behavior toward more cooperative. On the other hand, it is possible that members of the collectivistic organization or group may adjust their behavior toward more individualistic to accommodate the individualistic newcomers, which increases the possibility that collectivistic culture in such organization or group may be transformed into individualistic one. In contrast, if people with cooperative disposition join the organization or group with individualistic culture, they are likely to change their behavior toward more individualistic, which results in the continuity of the individualistic culture of the organization or group (See Figure 3).

However, Chatman and Barsade indicate that their findings illustrated above might have been reversed if their study had been conducted in collectivistic nations. That is, individuals with low disposition to cooperate may have behaved individualistically in response to an individualistic organizational culture and cooperatively in response to a collectivistic culture, while individuals with a high disposition to cooperate may have been the ones to show less variance in their highly cooperative behavior across the two types of organizations because they may have felt secure by adhering to the dominant norms of society. This is because larger social context (i.e., individualistic nations vs. collectivistic nations) in which studies are made may influence the interaction between organizational culture and individual dispositions.

Figure 3: Relationship among culture, fit and change



DYNAMIC INTERPLAY BETWEEN DIFFERENT TYPES OF FIT

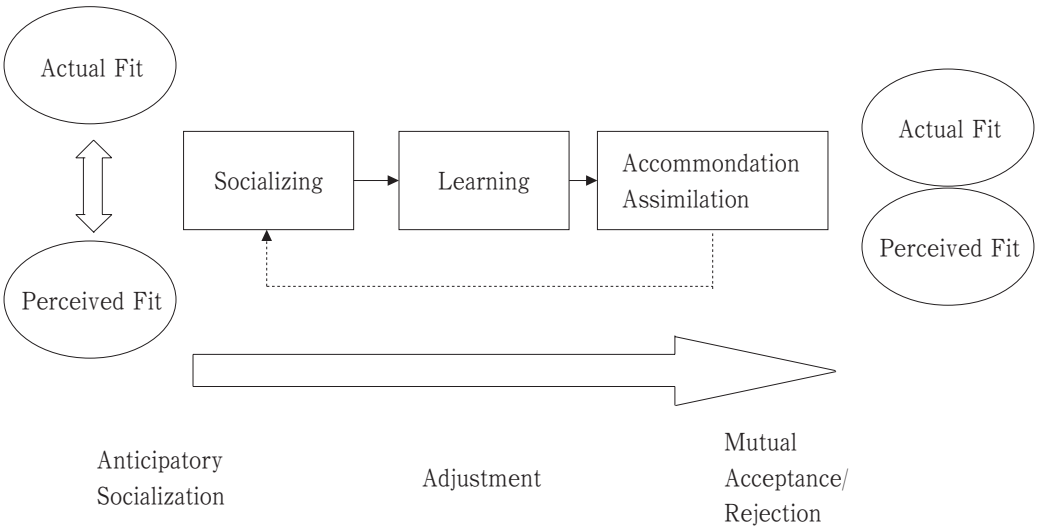
The role of socialization in actual and perceived fit

Fit researchers are also interested in the dynamic interplays between different types of P-E fit. One of the dynamic models that contains different types of P-E fit has been proposed by Kristof-Brown and her colleagues. Kristof-Brown, Bono and Lauver (1999) present the model of how socialization processes create and transform initial levels of actual and perceived P-E fit (P-J fit, P-G fit, and P-O fit) into resultant levels that affect long-term outcomes (See Figure 4). This model also reflects the interaction among newcomers, insiders, and organizations in the socialization process and suggests that socialization tactics result in changes to all of these parties and that modified levels of fit affect subsequent socialization tactic choice.

According to Kristof-Brown and her colleagues, the process in which socialization influences actual and perceived fit goes following way. Prior to organizational entry, actual fit between individuals and aspects of work environment (e.g., job, group, organization) may differ from the perceived fit, depending on the accuracy of expectations that are set during anticipatory socialization. That is, anticipatory socialization, which includes all of the activities and interactions engaged in by job seekers and recruiters or managers, plays a major role in the development of initial levels of P-E fit.

After organizational entry, the second stage of socialization, namely, adjustment stage occurs. In this stage, specific techniques are used to provide newcomers with knowledge, behaviors and attitudes necessary to be members of the organization. Socialization tactics are frequently described using Van Maannen and Schein's (1979) typology that classifies institutional practices that develop a custodial role orientation in employees, and individualized prac-

Figure 4: The role of socialization in actual and perceived fit



Note: Adapted from Kristof-Brown, et al. (1999) with modification.

tices that stimulate role innovation and creativity. These socialization tactics stimulate learning and subsequent accommodation and assimilation of the all of the party within organizations (i.e., newcomers and insiders). These processes may result in changes to actual fit, as well as in perceived and actual fit becoming more similar.

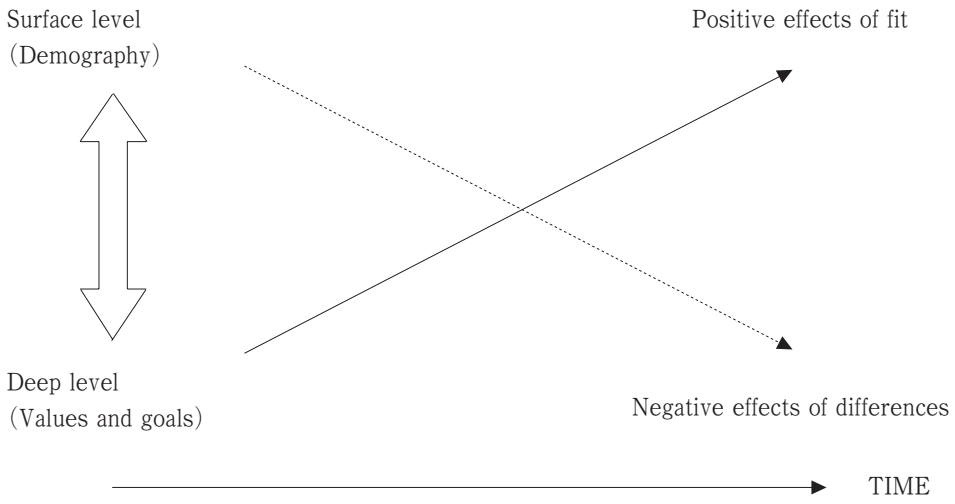
The final stage of the socialization process is called mutual acceptance/rejection. In that stage, a process of evaluation occurs in which all relevant parties assess whether or not their resultant fit is adequate. If resultant levels of fit are high, mutual acceptance will occur, whereas, if resultant levels are low, rejection by at least one party is likely.

The resultant fit through the socialization processes can be classified according to the fit or misfit in each of the P-J fit, P-G fit, and P-O fit. Resultant fit is divided into no fit (not compatible with the job, group, and organization), uni-dimensional fit (varying levels of fit with different aspects of the work environment), multidimensional fit (fit with two out of three dimensions of the work environment), and universal fit (fit with all aspects of the work environment). Different outcomes may occur depending on what type of resultant fit the newcomers end up with.

The changing effects of surface- and deep-level of fit

An important theoretical and practical question in considering fit in organizations or groups are relevant to the relationship between P-O fit, especially fit as value congruence, and demographic diversity. On the one hand, selecting people for P-O fit to enhance the organization's core value and promote commitment is considered important for individual outcomes and for at least short-term organizational effectiveness (Kristof, 1996; O'Reilly & Chatman, 1996). On the other hand, selecting people for diversity to ensure variety of perspectives is considered important to enhance creativity and innovation although the empirical findings are mixed

Figure 5: The changing effects of surface- and deep-level of fit



(Chatman & Flynn, 2001; Guzzo & Dickson, 1996; Watson, Kumar & Michaelsen, 1993). There is also socially compelling rationale for maintaining workforce diversity (e.g., race, sex, age, tenure, education). In this way, the two different but similar perspectives, P-O fit and demographic diversity, suggest conflicting directions.

Elfenbein and O'Reilly (2002)'s study, along with other studies on demography and fit, provides a framework to reconcile these two perspectives. They consider fit in terms of demography as "surface-level" while consider fit as value congruence as "deep-level," and theorize that P-O fit as deep-level fit is more critical than demographic fit for long-term individual and organizational outcomes.

Using 16 work-teams in a non-profit public service organization, findings of their study demonstrated that over time, P-O fit would be more predictive of work attitudes, perceptions of group process, and performance than variations in demographic differences. Note that in their study, the notion of P-O fit and P-G fit were used interchangeably. That is, P-O fit was measured as the match between individual values and group values. Furthermore, their results indicate that the effects of salient demographic differences diminish over time while the effects of P-O fit increase instead. Their result was consistent with several other studies which found that the initial negative effects of demographic heterogeneity were attenuated over time as people learned about he similarity in underlying values (Chatman & Flynn, 2001; Harrison, Price & Bell, 1998).

Therefore, the model based on Elfenbein and O'Reilly (2002) and other studies suggests that the effects of both surface-level fit/diversity and deep-level fit change over time. That is, surface-level fit/diversity is more salient in the early stages of group development process, in which diversity may have negative effects on group effectiveness, but the effects diminish over time. Instead, deep-level fit becomes more salient at the later stages of group development, in which deep-level fit will have positive effects on group effectiveness (Figure 5). This is be-

cause time allows members of the group to obtain information about their congruence or similarity in deep-level value and/or personality, and thus it increases the level of perceived fit, which may directly influence members' attitudes and behaviors. Therefore, as Chadman, Polzer, Barsade & Neale's (1998) suggest, this model predicts that benefits of demographic diversity is likely to emerge in groups or organizations when they acknowledge and share same goals or values, which increases the members' identity with their group or organization.

CONCLUDING REMARKS

This paper has introduced several models of P-E fit that reflect dynamic interplay between the person and the environment. Although these models capture the dynamic nature of P-E fit processes, there still seems to be a room for the further advancement of the dynamic P-E fit perspective. Several directions for future research to develop more comprehensive understanding of dynamic P-E fit are worth mentioning. First, considering both stable and unstable characteristics of the person and the environment at the same time would result in the development of more sophisticated models of P-E fit. Because both individuals and environments have stable and unstable characteristics, fit between unstable characteristics of the person and the environment, as well as fit between stable characteristics, would influence individual and environmental outcomes. However, little is known about the relationship between P-E fit in terms of stable characteristics and P-E fit in terms of unstable characteristics. Future research is expected to theorize and test this type of dynamic P-E fit process. Some individual difference variables such as adaptability (Ryan & Kristof-Brown, 2003) may be related to such a process.

Second, integrating the theories of leadership, organizational change, and P-E fit would result in a new perspective for dynamic P-E fit. To my knowledge, almost no research has attempted to integrate these theories. However, leadership and organizational change literature may have rich implications for understanding the dynamic nature of P-E fit. For example, leadership theories that focus on change such as transformational leadership (Bass, 1996) has received much attention recently. Transformational leadership theory focuses on the process in which leaders appeal to followers' values and emotions to transcend followers' self-interest for the sake of the organization or team (Yukl, 2002). How P-E fit is affected by transformational leadership and how initial levels of P-E fit are related to the effectiveness of transformational leadership are unanswered questions. Similarly, organizational change literature suggests that resistance to change is a common phenomenon when change is necessary for organizations (Connor, 1995; Yukl, 2002). It is predicted from the ASA framework that high P-E fit results in individuals' commitment to the status quo, and thus causes resistance to organizational change. It is intriguing to ask what would be the effects of transformational or other types of leadership in such a situation. Future research is needed to investigate this kind of theoretical and practical research questions.

Finally, empirical investigations of the dynamic P-E fir process require sophisticated research methodology. For example, researchers should consider using longitudinal research design in which P-E fit is measured more than once. Researchers should also consider using qualitative as well as quantitative research methods if they want to develop a new model inductively from empirical observations, or if the constructs of their interests in the dynamic models

cannot be easily measured. Using multilevel modeling (Heck & Thomas, 2000; Bryk & Roundenbush, 1992) such as hierarchical linear modeling (HLM) is also necessary if researchers are interested in different levels of variables (e.g., individual, group and organizational variables) and would like to analyze these variables at the same time.

In conclusion, the excitement about understanding of the P-E fit process would continue in various research fields and the development of more dynamic perspectives of P-E fit would have many implications for theory and practice for individuals and organizations.

REFERENCES

Bass, B. M., (1996). *A new paradigm of leadership: An inquiry into transformational leadership.* Alexandria, VA: Army Research Institute for the Behavioral and Social Sciences.

Bradley, J. C., Arthur, P. B., & George, J. M. (2002). More than the Big Five: Personality and careers. In D. C. Feldman (Ed.), *Work Careers: A Developmental Approach,* pp. 27-62, San Francisco, CA: Jossey-Bass.

Bryk, A. S, & Raudenbush, S. W. (1992). *Hierarchical Linear Models.* Newberry Park, CA: Sage.

Cable, D. M., & Judge, T. A. (1997). Interviewers' perception of person-organization fit and organizational selection decisions. *Journal of Applied Psychology, 82,* 546-561.

Chatman, J. A. (1989). Improving interactional organizational research: A model of person-organization fit. *Academy of Management Review, 14 (3),* 333-349.

Chatman, J. A. (1991). Matching people with organizations: Selection and socialization in public accounting firms. *Administrative Science Quarterly, 36,* 459-484.

Chatman, J. A., & Barsade, S. G. (1995). Personality, organizational culture, and cooperation: Evidence from a business simulation. *Administrative Science Quarterly, 40,* 423-443.

Chatman, J. A. & Flynn, F. (2001). The influence of demographic heterogeneity on the emergence and consequences of cooperative norms in work teams. *Academy of Management Journal, 44,* 956-974.

Chatman, J. A., Polzer, J. T., Barsade, S. G., & Neale, M. A. (1998). Being different yet feeling similar: The influence of demographic composition and organizational culture on work processes and outcomes. *Administrative Science Quarterly, 43,* 749-780.

Connor, D. R. (1995). *Managing at the speed of change: How resilient managers succeed and prosper where others fail.* New York: Villard Books.

Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment.* Minneapolis: University of Minnesota Press.

Dawis, R. V., Lofquist, L. H., & Weiss, D. J. (1968). A theory of work adjustment: A revision. *Minnesota Studies in Vocational Rehabilitation, no. 23,* 1-14.

Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology, Vol. 6,* 283-357. New York: Wiley.

Elfenbein, H. A., & O'Reilly, C. A. (2002). "Fitting in": The effects of relational demography and person-organization fit on group process and performance. *Research paper series, no. 1728, Graduate School of Business, Stanford University.*

Furnham, A. (2001). Vocational preference and P-O fit: Reflections on Holland's theory of vocational choice. *Applied Psychology: An international Review, 50,* 2-29.

Guzzo, R. A., & Dickson, R. M. (1996). Teams in organization: Recent research on performance

and effectiveness. In J. T. Spence, J. M. Barley, & J. Foss (Eds.), *Annual Review of Psychology, 47,* pp. 307-338. Palo Alto, CA: Annual Reviews.

Harrison, D., Price, K., & Bell, M. (1998). Beyond relational demography: Time and the effects of surface and deep-level diversity on work group cohesion. *Academy of Management Journal, 44,* 96-107.

Heck, R. H., & Thomas, S. L. (2000). *An introduction to multilevel modeling techniques.* NJ: Lawrence Erlbaum Associates.

Holland, J. L. (1959). A Theory of Vocational Choice. *Journal of Counseling Psychology, 6,* 35-45.

John, O. P. (1990). The big five factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In L. A. Pervin (Ed.), *Handbook of Personality Psychology,* pp. 66-100, New York: Culford.

Kristof-Brown, A. L., Bono, J. E., & Lauver, K. J. (1999). *Learning to fit in: How socialization affects perceived and actual person-environment fit.* Paper presented at the 14th Annual Conference of the Society for Industrial and Organizational Psychology, Atlanta, GA, April, 1999.

Lewin, K. (1938). *The conceptual representation and measurement of psychological forces.* Durham, NC: Duke University Press.

Muchinsky, P. M., & Monahan, C. J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior, 31,* 268-277.

O'Reilly, C. A., & Chatman, J. (1996). Culture as social control: Corporations, cults, and commitment. In B. Staw & L. Commings (Eds.), *Research in Organizational Behavior, Vol, 18,* 157-200, Greenwich, CT: JAI Press.

Ostroff, C., Shin, Y., & Feinberg, B. (2002). Skill acquisition and person-environment fit. In D. C. Feldman (Ed.), *Work Careers: A Developmental Approach,* pp. 63-90, San Francisco, CA: Jossey-Bass.

Parsons, F. (1909). *Choosing a vocation.* Boston: Houghton Miffin.

Pfeffer, J. (1997). *New Directions for Organizational Theory.* Oxford: Oxford University Press.

Ryan, A. M., & Kristof-Brown, A. L. (2003). Focusing on personality in person-organization fit research: Unaddressed issues. In M. R., Barrick & A. M. Ryan (Eds.), *Personality and Work: Reconsidering the Role of Personality in Organizations,* pp 262-288, San Francisco, CA: Jossey-Bass.

Schneider, B. (1987). The people make the place. *Personnel Psychology, 40,* 437-454.

Schneider, B., Goldstein, H. W., & Smith, D. B. (1995). The ASA framework: An update. *Personnel Psychology, 48,* 747-773.

Schneider, B., Smith, D. B., & Goldstein, H. W. (2000). Attraction-selection-attrition: Toward a person-environment psychology of organizations. In W. B. Walsh, K. H. Craik, & R. H. Price (Eds.), *Person-environment psychology: New directions and perspectives,* pp. 61-85, Mahwah, NJ: Erlbaum.

Sekiguchi, T. (2004). Person-organization fit and person-job fit in employee selection: A review of the literature, *Osaka Keidai Ronshu, 54,* 179-196.

Spokane, A. R., Meir, E., & Catalano, M. (2000). Person-environment congruence and Holland's theory: A review and reconsideration. *Journal of Vocational Behavior, 57,* 137-187.

Tinsley, H. E. A. (2000). The congruence myth: An analysis of the efficacy of the person-environment fit model. *Journal of Vocational Behavior, 56,* 147-179.

Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. *Research in Organizational Behavior, Vol. 1,* 209-264.

Watson, W. E., Kumar, K., & Michaelsen, L. K. (1993). Cultural diversity's impact on interaction

process and performance: Comparing homogeneous and diverse task groups. *Academy of Management Journal, 36,* 590-602.
Yukl, G. (2002). *Leadership in organizations.* Upper Saddle River, NJ: Prentice-Hall.