From Theory of Work Adjustment to Person–Environment Correspondence Counseling: Vocational Psychology as Positive Psychology

Donald E. Eggerth
Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health

This article argues that vocational psychology is, and has been, positive psychology. It provides an overview of the theory of work adjustment (TWA), one of the most robust and best validated theories in vocational psychology. It also provides an introduction to person-environment-correspondence (PEC) counseling, an extension of the TWA concepts and dynamics into the realm of general counseling. Linkages are made between the extensive TWA literature and current conceptualizations regarding well-being. In particular, TWA is related to the work of Moos, Ryan and Deci, and Walsh. Although PEC has yet to generate the research base of TWA, it is argued that, given the similarities between TWA and PEC, one might reasonably expect that many of the connections between TWA and well-being would also generalize to PEC. In addition, it is argued that PEC offers a counseling model that is in keeping with the broader philosophical orientation of positive psychology.

Keywords: theory of work adjustment, positive psychology, person–environment fit, well-being

In the years since the "millennial issue" of *American Psychologist* (see Volume 55, Number 1, 2000) devoted to positive psychology, well-being and the factors contributing to it have been of great interest to many psychologists. The focus on optimizing human potential, in particular, the potential for happiness, was welcomed by nearly all. However, as Savickas (2003) pointed out, for counseling psychologists, positive psychology is not an emerging field but has long been central to our identities as scientists and as practitioners. Savickas cited examples spanning the previous four decades of counseling psychology literature that anticipated the positive psychology research agenda proposed by Seligman (1998).

Although the evidence cited by Savickas (2003) was more than sufficient to make his point, he could easily have delved even further into the vocational psychology roots of counseling psychology. For example, it is remarkable how well the topics and approaches found in *How to Counsel Students* (Williamson, 1939) map onto the chapters in *Counseling Psychology and Optimal Human Functioning* (Walsh, 2003a), which was published more than six decades later. Another example may be found in *Vocational Interest Measurement* (Darley & Hagenah, 1955). In the introductory chapter, Darley and Hagenah (1955) forcefully argue, along lines not incongruent with current conceptualizations of multiculturalism and social justice, that economic empowerment achieved through academic and occupational success also leads to social acceptance and political power.

Of course, many of the individuals whose success Williamson (1939) and Darley and Hagenah (1955) hoped to facilitate were not the same as those who currently benefit from counseling psychology's focus on multiculturalism and social justice, though there are many parallels. Many were from working-class backgrounds and represented the first generation in their families to attend college. Many were from distinct and often socially marginalized minority groups. Many were the children of immigrants, and a language other than English was spoken in their homes. However, these were not the children of Hispanic or Asian immigrants, nor were they African Americans. They were from European immigrant stock. The languages spoken in their homes included Italian, German, Swedish, Polish, and Russian, to mention but a few. That few among us can recall a time when having a southern or eastern European surname could lead to discrimination in employment, housing, and education speaks volumes in support of the contention that academic success, with its attendant economic empowerment, leads to social and political power.

VOCATIONAL PSYCHOLOGY AS POSITIVE PSYCHOLOGY

I recall a lecture early in my graduate education in which the instructor (Lloyd Lofquist) attempted to persuade the class of the importance of vocational psychology by arguing for the centrality of work to personal identity. Lofquist asked, "After name, what is the second piece of information people share when introducing themselves?" The obvious answer was what they did for a living. He went on to argue that occupation colors nearly every aspect of our lives and the options available to us. For example, occupation affects not only what you do at work and how much money you make but also your status in the community, the car you drive, the part of town you live in, who you marry (because so many of us meet future spouses at work), who your friends are (again, many are met through work), what you do in your spare time, and the options your children have in their lives. It seems clear that if vocational psychology can affect so many of the things (job, home, hobbies, friendships, intimate relationships) that are factored into well-being, it has, quite

unheralded, been doing the work now called positive psychology for many, many decades.

Indeed, given the considerable literature linking person–environment congruence to job satisfaction (Walsh, 2003b) and given that job satisfaction is considered to be a major component of general life satisfaction (Walsh & Eggerth, 2005), one must conclude that vocational psychology should be viewed as central to positive psychology. Meta-analysis has found a correlation of .44 between job and life satisfaction (Tait, Padgett, & Baldwin, 1989). Although it is well known that correlation is not causation, considering the many life areas affected by work, it seems plausible to entertain the notion that job satisfaction may well contribute far more to non-work-related life satisfaction than the other way around.

THE THEORY OF WORK ADJUSTMENT (TWA)

TWA (Dawis & Lofquist, 1984) is the product of more than five decades of research at the University of Minnesota and is of the same lineage as the work of Williamson, Darley, and Hagenah. The impact of TWA extends far beyond informing career guidance counseling sessions. TWA conceptualizations of work have been adopted by U.S. government agencies responsible for public health and the welfare of workers. Consequently, TWA has the potential to influence policies and decision making on a national level. For example, TWA significantly influenced the Centers for Disease Control and Prevention job stress model. Another example of the impact of TWA on this level is the incorporation of its core variables into the Occupational Information Network (O*NET; U.S. Department of Labor, 1998), the U.S. Department of Labor's online database that is the successor to the *Dictionary of Occupational Titles* (U.S. Department of Labor, 1991). Of particular salience to the topic of this special issue is the extension of the concepts of TWA into a general model of therapy in person-environment-correspondence counseling (PEC; Lofquist & Dawis, 1991). However, before discussing PEC, let us first review the basics of TWA.

TWA views work as an interactive and reciprocal process between the individual and the work environment (Dawis & Lofquist, 1984). In simplest terms, individuals may be viewed as fulfilling the labor requirements of the work environment, in exchange for which the work environment fulfills a wide range of financial, social, and psychological needs for the individual. TWA provides a framework within which to predict the outcomes of the match between individual and work environment (the *predictive model*) and to describe the ongoing process of interaction (work adjustment) between worker and work environment (the *interaction model*). As pointed out by Hesketh and Griffin (2005), TWA has a deceptive simplicity. The basic framework can easily be explained to nonprofessionals, but the theory itself requires 27 propositions and 10 corollaries (see Dawis, 2004) to fully detail its assumptions.

The Predictive Model

Perhaps because of the wealth of instrumentation and supporting resources developed to operationalize it, most vocational psychologists are far more familiar with the predictive model of TWA than the interaction model. The predictive model builds on the basic assumption that individuals behave in ways that fulfill their needs (Dawis, 2004). Environmental events that satisfy needs are called *reinforcers*. The instrumentation developed for TWA uses 20 work-related reinforcers. Occupations may be characterized by the differing levels of reinforcers typically available to workers performing a given job. Individuals may also be characterized by their differing reinforcer requirements or *needs*. Similarly, workplaces have behavioral requirements (*job skills*) of workers that they seek to fulfill. As was the case with reinforcers and needs, occupations differ regarding the specific skills required and individuals differ regarding the skills they have to offer.

Hesketh and Griffin (2005) observed that few theories are comprehensive enough to be applied to career choice, selection, training, and organizational interventions. TWA accomplishes this by placing equal emphasis on satisfying the worker and the workplace and by using symmetrical processes to describe both. A worker who is well satisfied with a job may still perform at an unsatisfactory level from the perspective of the employer and be at risk of termination (Dawis & Lofquist, 1984). Conversely, an employer may be well satisfied with a worker's performance, but the worker might be dissatisfied with the job and elect to seek other employment. Obviously, the most stable employment situations occur when both worker and employer are mutually satisfied. The predictive model of TWA matches worker needs and workplace reinforcers.

Correspondence is the match between worker needs and work environment reinforcers and may be used to predict job *satisfaction* (Dawis & Lofquist, 1984). The match between worker abilities and the behavioral requirement of a job predicts *satisfactoriness*. The term *correspondence* also refers to the degree to which worker and workplace fulfill the other's requirements. Given mutual satisfaction, *tenure* (remaining on and being retained in a job) is predicted. If either is dissatisfied, tenure is not predicted.

Most TWA correspondence research has operationalized job satisfaction at the global level. The Minnesota Satisfaction Questionnaire (MSQ; Weiss, Dawis, England, & Lofquist, 1967) was developed to assess job satisfaction using items corresponding to the same 20 reinforcer dimensions used by the other TWA instruments. Responses to the MSQ can be summed to produce a general (global) satisfaction score, the level at which most TWA research addresses job satisfaction. However, the MSQ can also be scored to assess the intrinsic and extrinsic components of job satisfaction. *Intrinsic job satisfaction* refers to those aspects of the job that are inherent to the nature of the work being performed and that are primarily internally experienced by the worker (e.g., sense of challenge, sense of achievement, and level of independence). *Extrinsic job satisfaction* refers to those aspects of the job that are not inherent to the nature of the work and that are primarily

under the control of one's employer (e.g., compensation, job security, and working conditions). Dawis (1991) encouraged researchers to investigate the extrinsic and intrinsic facets of job satisfaction to identify relationships that otherwise might not emerge at the level of global satisfaction. This suggestion has been supported by two recent studies of health care workers. One study (Eggerth, 2004) found significant differences between intrinsic and extrinsic job satisfaction that may be related to organizational restructuring. The other study found a different relationship between occupational attributional style and intrinsic job satisfaction than between occupational attributional style and extrinsic job satisfaction (Welbourne, Eggerth, Hartley, Andrew, & Sanchez, 2007).

The Interaction Model

Another basic assumption of TWA is that individuals seek to achieve and maintain correspondence with their environments (Dawis & Lofquist, 1984). This process is referred to as *work adjustment*. After the initial match is made between individual and occupation, the remainder of one's tenure in that occupation is spent adjusting to changing work circumstances. Some arise from external sources such as corporate mergers, downsizing, or job redesign. Others are internally driven, for example, seeking and/or attaining promotion and balancing the conflicting demands of work and family.

Work adjustment may be conceptualized as occurring along a bipolar axis (Dawis & Lofquist, 1984; see Figure 1). One pole represents perfect correspondence between worker and workplace. The other pole represents complete discorrespondence. Moving along the axis away from perfect correspondence represents an ever increasing level of discorrespondence. At lower levels, discorrespondence is tolerable and no adjustment behavior occurs. At some higher level (termed the *lower threshold*), discorrespondence becomes intolerable and adjustment behavior begins. The distance between the point of perfect correspondence and the lower threshold defines *flexibility*, the amount of discorrespondence that can be tolerated by an individual before engaging in adjustment behavior. Adjustment behavior can take place in two modes: *active* and *reactive*. In active mode, workers attempt to increase correspondence by changing the work environment, for example, asking one's employer to allow telecommuting on a regular basis. In reactive mode, workers attempt to change the self to become more correspondent with the work environment. An example would be seeking training to improve work skills.

Work adjustment may also be conceptualized in terms of *locus of initiative* and *locus of change* (Dawis, 2004). Locus of initiative refers to who initiates the change process—the worker or the employer. Locus of change refers to who actually changes—the worker or the workplace. Further along the axis (termed the *upper threshold*), discorrespondence becomes so intolerable that adjustment behavior ceases and the worker seeks to leave the work environment. The distance between the lower and the upper thresholds defines *perseverance*, the length of time an individual will continue to engage in adjustment behavior.
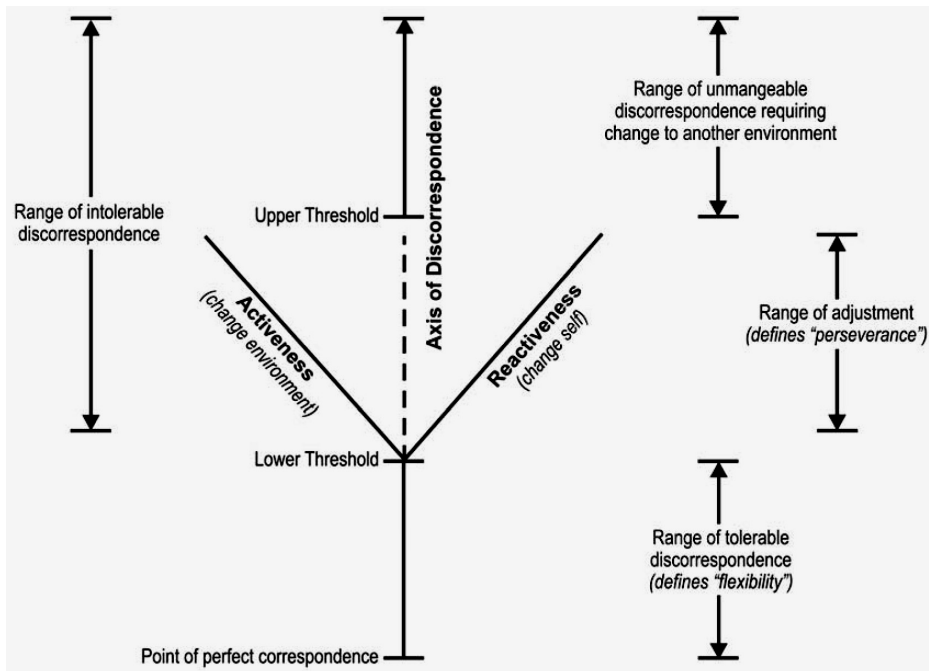
Figure 1.   Relationships among the adjustment style dimensions of the theory of work adjustment. *Source.* Adapted from Dawis and Lofquist (1984).

As was indicated above, work adjustment was primarily discussed here from the perspective of the worker. However, it can also be conceptualized, in parallel terms, from the perspective of the employer. It should also be noted that flexibility and perseverance, as defined by the locations of lower and upper thresholds along the axis, will vary from worker to worker and from employer to employer.

Evaluation and Reflections on the Danger of Throwing Out the Baby With the Bathwater

In recent years, some have come to view person-environment (P-E) fit models as belonging to vocational psychology's past, not its future. Therefore, one might question the ongoing value of TWA, much less the wisdom of building a general theory of counseling on such a foundation. Certainly, the most familiar of P-E fit models, Holland's theory of vocational types, has been subjected to intense scrutiny and found so wanting that some critics (Hesketh, 2000; Tinsley, 2000, 2006) have argued that it is time for it to be abandoned. It is beyond the scope of this article to touch on the merit of these criticisms. Interested readers are referred to Gore and Brown (2006). Moreover, for the purposes of this article, it suffices to observe that, unfortunately, the condemnation of one P-E fit model, albeit the most prominent, seems to have been generalized by some to all P-E fit models. It is significant to note that

Tinsley (2000), one of Holland's most vituperative critics, concluded that there was overwhelming evidence "that the P-E fit model provides a valid and useful way of thinking about the interaction between the individual and the environment" (p. 150). In particular, Tinsley singled out TWA as one of "the most thoroughly investigated and widely applied P-E fit models ever developed" (p. 148) and praised its instrumentation as "an exemplar of commensurate measurement" (p. 152). Hesketh, another of Holland's sharpest critics, refers to TWA as being "in the best tradition of an empirically testable and applicable theory" (Hesketh & Griffin, 2005; p. 245) and opines that "TWA has much to offer in guiding future research and in assisting counselors and coaches equip people to cope with the adaptive requirements of the modern workplace" (p. 262).

As was previously mentioned, TWA's core variables were incorporated in the O*NET (U.S. Department of Labor, 1998), the online database that is the successor to the *Dictionary of Occupational Titles* (U.S. Department of Labor, 1991). Indeed, anyone trained by the Vocational Assessment Clinic at the University of Minnesota likely experienced déjà vu when they first encountered the O*NET. The Vocational Assessment Clinic was established to act as a forum for testing the concepts and constructs of TWA with adult clients experiencing significant work adjustment concerns. The conceptual framework used by the Vocational Assessment Clinic was adopted nearly "whole cloth" by the early developers of the O*NET.

TWA's impact reaches well beyond the confines of career guidance sessions. The influential work stress model of the National Institute for Occupational Safety and Health (NIOSH; part of the Centers for Disease Control and Prevention) was directly influenced by TWA. This model conceptualizes job stress as arising from a mismatch between job demands and/or rewards with worker skills and/or needs (NIOSH, 1999). Clearly, all things considered, P-E fit model or not, TWA remains influential, is well respected, and provides solid foundation on which to build.

PEC

In simplest terms, PEC may be viewed as extending the basic concepts of TWA to a broader range of P-E interactions. As was the case with TWA, the interactive and reciprocal process by which correspondence is sought and/or maintained may be conceptualized using parallel structures for both person and environment. In keeping with its application to a broader range of P-E interactions, PEC has correspondingly broadened its terminology. For TWA, correspondence leads to job satisfaction or dissatisfaction. For PEC, correspondence leads to positive or negative affective consequences (Lofquist & Dawis, 1991). TWA speaks of abilities and ability requirements, whereas PEC speaks of response capabilities and response requirements.

Paradoxically, although PEC may be conceptualized as broadening the application of the basic concepts of TWA, the actual P-E interactions to which it would typically be applied are far smaller, though no less rich, in scale. In TWA, the environment was characterized by a summation of an entire workplace: job demands, job rewards, coworkers, management, and the implementation of company policies. In PEC, the environment might be one's immediate family or even a single person, such as a spouse or significant other (Lofquist & Dawis, 1991). In such two-person P-E units, each individual serves as the other's environment. For example, in marriage counseling, the husband's "environment" is his wife and the wife's "environment" is her husband.

Paralleling TWA, in PEC individuals are conceptualized as bringing response capabilities and reinforcer preferences, or needs, to an environment (Lofquist & Dawis, 1991). In turn, the environment has response requirements of the individual and reinforcer capability for satisfaction of needs. In TWA, response capabilities were conceptualized in terms of occupationally relevant abilities such as clerical perception and spatial visualization. However, in PEC, the relevant response capabilities might be social or interpersonal skills. The reinforcers offered by environments similarly shift. As was the case in TWA, the exact mixture of responses and reinforcers will vary from person to person and from environment to environment. The level of satisfaction with the interaction, for both the individual and the environment, depends on the correspondence between the two.

Similar to TWA, PEC may also appear deceptively simple. The formal statement of PEC presented by Lofquist and Dawis (1991) contains 16 propositions and 33 corollaries. A detailed examination of all is beyond the scope of this article. Therefore, this article will offer only a brief overview of these propositions.

As might be expected given its origins in TWA, Proposition I of PEC asserts that individuals are inherently motivated to achieve and maintain optimal correspondence with their environments (Lofquist & Dawis, 1991). Hesketh and Griffin (2005) considered TWA's firm grounding in learning theory to lend considerable strength of the theory. The corollaries elaborating on Proposition I indicate a similar emphasis, proposing that preferences for certain reinforcers and avoidance of punishing situations are learned. Individuals seek to replicate in an environment reinforcement conditions previously found to have been satisfying and to avoid those previously found to lead to negative consequences.

Proposition II of PEC holds that individuals differ in response capabilities and in reinforcer requirements and that environments differ in response requirements and reinforcer capabilities (Lofquist & Dawis, 1991). This is a clear statement of the individual differences approach that has been characterized as being one of the pillars of the "Minnesota Point of View" (Lofquist & Dawis, 1991, p. ix) and that has strongly imprinted both TWA and PEC.

Most of the corollaries attendant to Proposition II relate to a formal statement of the interaction processes affecting correspondence that parallels TWA. However, one corollary (IIA) states that although PEC recognizes that each total P-E interaction is unique, it will share elements in common with other such P-E interactions

(Lofquist & Dawis, 1991). Support for this proposition may be found in Moos's life domains model (Swindle & Moos, 1992), which proposes that individuals may be conceptualized as existing within a constellation of overlapping environments, or *life domains*. Some of these domains are self, marriage, family, friends, work, and health. Moos (1976) developed 10 Social Climate Scales to characterize the most salient dimensions found across a range of domains. Although specifics vary from domain to domain, Moos found that the broad categories of relationship, personal development, and system maintenance and system change are cross-cutting. In their book on PEC, Lofquist and Dawis (1991) offer research versions of the TWA instrumentation with wording that has been modified to be applicable to more general situations.

Proposition III of PEC states that individuals constantly interact with a variety of environments but that some environments are more salient than others. The salience of a given environment is moderated by factors such as the length of time spent interacting with it and/or the emotional intensity of the interaction.

Proposition IV states that individuals seek counseling when they are unable to satisfy their needs in a given environment. Presenting problems are often ways of describing how one's needs are not being met and may be conceptualized as P-E discorrespondence. This discorrespondence typically falls into two broad categories: (a) the client's inability to meet environmental response requirements and (b) the client's inability to find environmental reinforcers to satisfy his or her needs.

Almost unique in the literature is the emphasis PEC places on the counseling process. The remaining 11 propositions (V to XVI) all deal with different aspects of the counseling process, including several framing the counselor–client relationship in terms of a P-E interaction, which may be described in terms of, and functions according to, the principles of PEC.

COUNSELING APPLICATION

PEC is firmly grounded in E. G. Williamson's philosophy of "counselor as educator," and clients are expected to leave counseling with the ability to apply newly acquired insights and behavior tools to other life problems. PEC views counseling as a problem-solving process that focuses on the accuracy of client perceptions, appropriateness of client choices, and effectiveness of client actions. As indicated previously, PEC views the counselor–client relationship as a P-E interaction that follows the same principles as all other P-E interactions. Consequently, counselor and client are part of an interactive and reciprocal process involving mutual satisfaction of the other's needs.

As suggested by Proposition IV, in PEC, most presenting problems are viewed as arising from intolerable discorrespondence between the client and his or her environment. Clearly, then, a primary task for counseling using the PEC model is to identify the P-E interaction or interactions most associated with a given presenting problem.

The next steps involve identification of the relevant need or reinforcer and response capability or response requirements for a given P-E interaction. In TWA, counselors are able to use a well-validated battery of instruments to help the client to assess these dimensions and to identify those areas of greatest discorrespondence. However, such instruments are only at the research stage for PEC, and client appraisals of self and environment must be more completely relied on. Consequently, counselors must draw on relevant experience and interviewing skills to assess the accuracy of the client appraisals. This is not meant as a challenge to the client's veracity but simply as part of the "reality checking" sometimes required in any therapeutic relationship. For example, if a client's needs are not being met by a given environment, it might not be because the reinforcers are not available (as judged by the client) but rather because they are being withheld because of a failure of the client to satisfy the response requirements of the environment. Such a determination would be critical for determining the future course of the counseling.

Once the nature and degree of discorrespondence has been identified, the counselor and the client can begin to explore problem-solving strategies. The basic approaches to consider for reducing discorrespondence are for the client to attempt to modify the current environment, to adjust to the current environment, or to find an alternate environment that is more correspondent. Let us consider each in turn.

Attempting to modify one's environment may often be a client's first choice. After all, it requires minimal effort (in terms of self-exploration and behavior modification) on his or her part and places the onus for change on the environment. However, given that one almost always exercises more control over one's self than over environments, this may not be the most effective strategy. Indeed, in many instances, it will have been tried and failed prior to seeking counseling. In instances in which counseling helps a client to clearly identify sources of dissatisfaction for the first time, simply approaching the environment and asking for it to require less of or offer more to the client may be a strategy worth pursuing. However, should this fail, the client will need to become open to other approaches.

Adjusting to the environment may follow two broad approaches. The client may seek to better meet the response requirements of the environment. For example, given a presenting problem of poor communication within a relationship, the partners might practice active listening with their counselor. This is analogous to workers seeking new work-related skills. Another approach to adjusting to the environment can be to modify one's reinforcement requirements to be more in line with environmental offerings. Again using the example of poor communication with a relationship, the partners may decide to focus less on the affective content of conversations and more on the trustworthiness and reliability of their partner. This may be conceived of as reprioritization of one's reinforcer preferences. It should be noted that in these examples, both individuals from a two-person P-E interaction (a relationship) are involved in counseling. However, the same principles can be applied to counseling situations involving only one client.

Finding an alternate environment that is more correspondent is not the "nuclear option" that it first appears. Certainly, the client may choose to abandon the current environment for an entirely new one. However, in cases where the P-E interaction is of longstanding and of great emotional salience (e.g., a marriage), such a move (divorce) is not to be taken lightly. Fortunately, as Proposition II suggests, P-E interactions can share many elements in common. Therefore, it may be possible for the counselor and client to identify a suitable alternative environment in which to meet a given need that is unmet in a P-E interaction that is otherwise satisfactory. For example, consider a client with a spouse who does not share a deep love of classical music. This client could seek out opportunities to find others who share this interest by joining the symphony guild, being active in relevant Internet chat groups, and/or volunteering at the local public radio station.

TWA, PEC, AND POSITIVE PSYCHOLOGY

As was discussed earlier, vocational psychology has long pursued goals congruent with positive psychology's aim to optimize human potential and well-being. It was further argued that work affects so many life areas that good career fit and the resultant job satisfaction may well contribute more to general well-being than the reverse. If this is true of vocational psychology in general, it is certainly true of TWA, one of the best validated and most robust theoretical models in vocational psychology (Hesketh & Griffin, 2005; Tinsley, 2000). There is an extensive literature (Dawis & Lofquist, 1984; Eggerth, 2004; Rounds, Dawis, & Lofquist, 1987) demonstrating a significant relationship between need–reinforcer correspondence and job satisfaction, which is a major component of general life satisfaction.

In his work touching on positive psychology, Walsh (2003b, 2006; Walsh & Eggerth, 2005) has repeatedly emphasized the importance of goal directedness and goal attainment to well-being. Dawis (2001) suggests that models such as TWA might provide direction both as a guide regarding which goals to aim for and as an aid for understanding the motivation to achieve one's goals.

In their review of the literature, Ryan and Deci (2001) suggest that most models of well-being may be categorized as either hedonic or eudemonic in perspective. The hedonic perspective defines well-being in terms of pleasure attainment and pain avoidance. The eudemonic perspective focuses on meaning and self-realization and defines well-being in terms of doing what is worthwhile. The hedonic and eudemonic perspectives mirror what Seligman and Csikszentmihalyhi (2000) referred to as the distinction between pleasure and enjoyment. Pleasure refers to satisfaction of basic bodily needs—food, sex, physical comfort. Enjoyment refers to the good feelings people experience when they do something that stretches them in new directions—participating in athletics, an artistic performance, stimulating conversation.

Given TWA's emphasis on satisfaction of reinforcer preferences, one might easily conclude that it falls within the hedonic perspective. However, structural analysis of the TWA instrumentation suggests there are six dimensions or values underlying the 20 work need–reinforcer dimensions used by TWA (Dawis & Lofquist, 1984). These values have been labeled achievement, comfort, status, altruism, safety, and autonomy. *Achievement* reflects making use of one's abilities and feelings of accomplishment. *Comfort* reflects feeling comfortable and an absence of stress or distress. *Status* reflects gaining recognition from and/or having authority over others. *Altruism* reflects helping others and having a sense of doing good for others. *Safety* reflects an appreciation for structure and order and an absence of unpredictability. *Autonomy* reflects being independent and feeling in control. Given work values such as these, one might conclude that TWA also falls into eudemonic perspectives of well-being. Walsh (2003b) observed that it is probably most useful to think of well-being as reflecting aspects of both the hedonic and eudemonic models. It would seem that TWA does this.

In their discussion of self-determination and well-being, Ryan and Deci (2000) differentiate between extrinsic and intrinsic motivation. Intrinsic motivation refers to doing an activity for the inherent satisfaction of the activity itself. In contrast, extrinsic motivation refers to doing an activity to attain some separable reward. This closely parallels the concepts of intrinsic and extrinsic job satisfaction discussed earlier. Recall that intrinsic job satisfaction reflects aspects that are inherent to the job itself (e.g., feelings of accomplishment) and extrinsic job satisfaction reflects aspects that are not inherent to the job itself and that are usually under the control of the work environment (e.g., salary). Ryan and Deci report that individuals who are intrinsically motivated tend to experience greater levels of well-being than do individuals who are extrinsically motivated. TWA makes no differential predictions; job satisfaction arises from the degree of correspondence between worker needs and job reinforcers, regardless of the whether the most salient need or reinforcer dimensions are categorized as being related to extrinsic or intrinsic job satisfaction. However, there are hints in the literature (Eggerth, 2004) that extrinsic reinforcers may be more relevant to job dissatisfaction than intrinsic reinforcers during times of organizational upheaval.

Walsh (2003b) discussed Moos's social ecological approach (also referred to as the life domains model) in connection with the broader well-being literature. As was mentioned earlier in the section on PEC, Moos's work identified three broad categories of P-E interaction dimensions that cut across a wide range of life domains. Walsh considered this finding to be of major importance to the well-being literature. The relationship dimensions assess the degree people in a given setting support one another and feel free to openly express themselves. The personal development dimensions assess basic goals of a given setting and how personal development and self-enhancement occurs in that setting. The system maintenance and system change dimensions assess the clarity with which an environment states its goals, how it maintains control and responds to change.

The TWA need or reinforcer dimensions may be mapped onto Moos's three cross-cutting categories. Structural analysis of the six TWA work values suggests that they may be grouped into internal, social, or environmental reinforcer areas (Shusbachs, Rounds, Dawis, & Lofquist, 1978), categories whose interpretation echoes those of the cross-cutting categories proposed by Moos.

The contributions of TWA in this area go beyond simple convergence with the concepts of other researchers. Dawis (2001) proposes that the six TWA values form contrasts. Achievement contrasts with comfort. On one hand, it is often not possible to attain difficult goals without stress, sacrifice, and discomfort. On the other hand, a comfortable, stress-free life may come at the cost of giving up ambitions. Altruism contrasts with status. Altruism focuses on the well-being of others, whereas status focuses on self-advancement and self-promotion. Finally, autonomy contrasts with safety. A highly autonomous person depends on himself or herself independent of environment. A person with high safety needs depends on the environment to provide order and structure, though retaining control over the choice of environment in which to be. These value contrasts have the potential to help clients to understand value conflicts both within themselves and within P-E interactions. For example, one spouse's value of achievement, reflected by a willingness to work evenings and weekends, may conflict with the other spouse's value of comfort, as reflected by quiet evenings devoted to conversation and listening to music. If these contrasts reflect psychological reality, counselors may have to help clients accept that they cannot "have it all" in life.

PEC clearly does not enjoy the depth of research that TWA does. However, to the extent that PEC is a more general model of TWA, it seems safe to view it as having been built on a solid chassis. PEC's authors (Dawis, 2001; Lofquist & Dawis, 1991) anticipate that many of the value dimensions and relationships found by TWA will be paralleled in P-E interactions outside of the workplace. To the extent that this is borne out, one can expect the preceding discussion connecting TWA to other models addressing well-being to be relevant to PEC as well.

The above having been said, independent of its "vicarious validation" via TWA, PEC clearly has strengths that are congruent with the spirit and approach of positive psychology. Coming as it does from the Williamson tradition, PEC empowers clients to be active agents in solving the difficulties facing them. PEC teaches clients a robust and flexible problem-solving approach that is applicable not only to the "presenting problem" but to other problems experienced long after the end of counseling. The individual differences approach accepts that clients and their problem situations will vary across common continuums. This approach has tremendous potential for destigmatizing client behaviors. In this orientation, "average" refers to the mean. Deviation from it does not necessarily imply pathology and holds no value judgment, merely the statistical anticipation that fewer people might be similar to the client on this set of variables. Unless a behavior is clearly harmful to the client or others, there is little room for moralizing. A behavior is best judged on the merits of whether or not it leads to the client's desired reinforcement.

FINAL THOUGHTS

Kurt Lewin is frequently quoted as saying, "There is nothing so practical as a good theory." By Lewin's criteria, TWA is certainly a good theory. Since its initial forging in the 1950s, TWA has been repeatedly tempered over the course of more than five decades of ongoing research. It is clearly articulated in a series of propositions and corollaries. Those propositions and corollaries that have been tested have generally fared well. Those propositions and corollaries that have not yet been tested hold the potential to offer future researchers decades of fruitful endeavors. PEC, although currently largely untested, when fleshed out could significantly add to the impact and longevity of TWA. It is worth noting that the research leading to the identification of the TWA dimensions, which so closely parallel those proposed in the current positive psychology literature, was conducted many years prior to the emergence of the movement we now refer to as positive psychology. Indeed, other than offering a new nomenclature to describe what vocational psychology has long been doing, applying many of the precepts of positive psychology to vocational psychology seems a bit like "carrying coals to Newcastle."

REFERENCES

Darley, J. G., & Hagenah, T. (1955). *Vocational interest measurement: Theory and practice*. Minneapolis: University of Minnesota Press.

Dawis, R. V. (1991). Vocational interests, values, and preferences. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 883-871). Palo Alto, CA: Consulting Psychologists Press.

Dawis, R. V. (2001). Toward a psychology of values. *The Counseling Psychologist*, 26(3), 458-465.

Dawis, R. V. (2004). The Minnesota theory of work adjustment. In S. D. Brown & R. W. Lent (Eds.), *Career development: Putting theory and research into practice* (pp. 3-23). Hoboken, NJ: John Wiley.

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

Eggerth, D. E. (2004). Applying the Bradley-Terry-Luce model to P-E fit. *Journal of Vocational Behavior*, 64(1), 92-107.

Gore, P. A., & Brown, S. D. (2006). Simpler may still be better: A reply to Eggerth and Andrew. *Journal of Career Assessment*, 14(2), 276-282.

Hesketh, B. (2000). The next millennium of "fit" research: Comments on "The congruence myth: An analysis of the efficacy of the person-environment fit model" by H. E. A. Tinsley. *Journal of Vocational Behavior*, 56(2), 190-196.

Hesketh, B., & Griffin, B. (2005). Work adjustment. In W. B. Walsh & M. L. Savicas (Eds.), *Handbook of vocational psychology* (3rd ed., pp. 245-266). Mahwah, NJ: Lawrence Erlbaum.

Lofquist, L. H., & Dawis, R. V. (1991). *Essentials of person-environment-correspondence counseling*. Minneapolis, MN: University of Minnesota Press.

Moos, R. H. (1976). *The human context*. New York: John Wiley.

National Institute for Occupational Safety and Health. (1999). *Stress at work* (99-101). Washington, DC: Author.

Rounds, J. B., Dawis, R. V., & Lofquist, L. H. (1987). Measurement of person-environment fit and prediction of satisfaction in the theory of work adjustment. *Journal of Vocational Behavior*, 31, 297-318.

Ryan, R. M., & Deci, E. I. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*, 55(1), 68-78.

Ryan, R. M., & Deci, E. I. (2001). On happiness and human potentials: A review of research on hedonic and eudemonic well-being. *Annual Review of Psychology*, 52, 141-166.

Savickas, M. L. (2003). Toward a taxonomy of human strengths: Career counseling's contribution to positive psychology. In W. B. Walsh (Ed.), *Counseling psychology and optimal human function* (pp. 229-249). Mahwah, NJ: Lawrence Erlbaum.

Seligman, M. E. P. (1998). Building human strength. Psychology's forgotten mission. *APA Monitor*, 29(1), 2.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.

Shusbachs, A. P. W., Rounds, J. B., Dawis, R. V., & Lofquist, L. H. (1978). Perception of work reinforcer systems: Factor structure. *Journal of Vocational Behavior*, 13, 54-62.

Swindle, R. W., & Moos, R. H. (1992). Life domains in stressors, coping and adjustment. In W. B Walsh, K. H. Craik, & R. H. Price (Eds.), *Person-environment psychology: Models and perspectives* (pp. 1-33). Hillsdale, NJ: Lawrence Erlbaum.

Tait, M., Padgett, M. Y., & Baldwin, T. T. (1989). Job and life satisfaction: A reevaluation of the strength of the relationship and gender effects as a function of the date of study. *Journal of Applied Psychology*, 74(3), 502-507.

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.

Tinsley, H. E. A. (2006). A pig in a suit is still a pig: A comment on "Modifying the C index for use with Holland codes of unequal length." *Journal of Career Assessment*, 14(2), 283-288.

U.S. Department of Labor. (1991). *Dictionary of occupational titles* (4th ed.). Indianapolis, IN: JIST Works.

U.S. Department of Labor. (1998). *O*NET 98 viewer user's guide for Version 1.0*. Washington, DC: Government Printing Office.

Walsh, W. B. (2003a). *Counseling psychology and optimal human functioning*. Mahwah, NJ: Lawrence Erlbaum.

Walsh, W. B. (2003b). Person-environment psychology and well-being. In W. B. Walsh (Ed.), *Counseling psychology and optimal human function* (pp. 93-121). Mahwah, NJ: Lawrence Erlbaum.

Walsh, W. B. (2006). Person environment psychology and work: Theory, implications, and issues. *The Counseling Psychologist*, 34(3), 443-455.

Walsh, W. B., & Eggerth, D. E. (2005). Vocational psychology and personality: The relationship of the five-factor model to job performance and job satisfaction. In W. B. Walsh & M. L. Savicas (Eds.), *Handbook of vocational psychology* (3rd ed., pp. 267-295). Mahwah, NJ: Lawrence Erlbaum.

Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota satisfaction questionnaire. Minnesota studies in vocational rehabilitation: XXII*. Minneapolis: University of Minnesota.

Welbourne, J. L., Eggerth, D., Hartley, T. A., Andrew, M. E., & Sanchez, F. (2007). Coping strategies in the workplace: Relationships with attributional style and job satisfaction. *Journal of Vocational Behavior*, 70(2), 312-325.

Williamson, E. G. (1939). *How to counsel students: A manual of techniques for clinical counselors*. New York: McGraw-Hill.