Effects of Congruence and Character-Strength Deployment on Work Adjustment and Well-Being

Dr. Hadassah Litman-Ovadia
Head of Organizational and Vocational Studies for Master’s Degree in Psychology
Ariel University Center of Samaria, Israel
E-mail: olontamar@bezeqint.net, Phone: 972 3 5354792.

Dr. Nitza Davidovitch
Ariel University Center of Samaria, Israel

Acknowledgement
The authors wish to express their thanks to the Regional Samaria and Jordan Rift Valley R&D Center and the Research Authority of the Ariel University Center of Samaria for their support, which enabled this study. The authors also wish to thank Noach Milgram for his helpful comments on a previous version of this paper.

Abstract
This paper reports results of a quantitative study of occupational adjustment and personal well-being in a sample of Israeli college graduates (N = 85). We hypothesized that character-strength deployment and the congruence between previous academic studies and current occupation will be positively correlated with occupational adjustment and with personal well-being. Findings indicated that career commitment was correlated with congruence, personal well-being was correlated with character-strength deployment, while job satisfaction was correlated with both character-strength deployment and congruence. The findings of the present study represent an effort to integrate the fields of vocational and positive psychology in theory and in practice.

Introduction
Since the establishment of the field, vocational psychology has focused on optimal, normative human functioning in an attempt to explore and understand how individuals can produce the best of themselves, and to develop and improve methods to help individuals attain this goal in practice (Lopez & Edwards, 2008). Since Seligman announced the establishment of the Positive Psychology Movement in 1998, positive outcomes in life in general, and in key life domains, such as overall personal well-being and work satisfaction, have become central research topics in psychology. While vocational psychology tends to explain personal well-being, work satisfaction, and career commitment using models of person–environment fit, positive psychology tends to explain personal well-being and work satisfaction using models of character strengths. The question arises whether a joint perspective using these two fields of psychology offers a better explanation of these outcomes than each field independently. Since Parsons (1909) argued that an appropriate career choice is based on congruence between the self and the world of work, the so-called “person–environment fit” has been used as the foundation for most career choice theories, which assume that greater congruence goes hand in hand with greater job satisfaction, career commitment, and personal well-being.

More recently, Holland (1997) has emphasized congruence between interests and personality traits on the one hand, and indices of work adjustment (job satisfaction, achievement, and perseverance) on the other. Hundreds of studies using diverse scales and populations have been conducted on the congruence hypothesis. In general, meta-analyses (e.g., Spokane, Meir, & Catalano, 2000) have shown that relationships between congruence and job satisfaction do not exceed the “magic 0.30 correlation plateau” (Spokane, 1985, p. 335). While studies examining congruence with reference to specializations within occupations, rather than to occupations themselves, have obtained stronger relationships, these were moderate at best (e.g., Meir, 1989; Meir & Melamed, 2005). Arnold (2004) identified and discussed possible reasons for the weak associations between congruence and outcome measures, based on his review of many congruence studies.
One of his main conclusion was that Holland's measures of people and environments partially neglect the following important features, which make the congruence less important in some cases: (a) features of the work environment that satisfy all individuals, independent of their personal interests or personality traits (e.g., work variety); and (b) features of personality that generate job satisfaction, independent of the work environment. As an illustration of his claim, Arnold cited evidence that extroverts are happier than introverts, independent of their work environment. Arnold’s approach raises the question of whether job satisfaction and personal well-being are related to general factors, including features of work environments that offer an opportunity for the expression of character strengths.

Character-Strength Deployment in the Workplace

Models of well-being that are based on character strengths attribute importance to opportunities for character-strength deployment (Duckworth et al., 2005). In these models, the opportunity and ability to deploy one’s character strengths are presumed to lead to personal pleasure, life engagement, and life meaningfulness. Work is a major life domain that affords opportunities for character-strength deployment (Seligman, 2002) and, at the same time, is a source of satisfaction associated with personal well-being (Diaz-Serrano & Cabral-Vieira, 2005). Research by Dik (2005) suggested a possible interaction between congruence and character-strength deployment on work adjustment. He found that among workers who perceive fewer opportunities for active work involvement, there is a stronger relationship of congruence to job satisfaction than among workers who perceived more opportunities for active involvement in their work. Dik concluded that emphasis should be placed on congruence among career-counseling clients who report low levels of investment in work, because congruence may compensate for the lack of opportunity for active involvement in the work environment. If we assume that active involvement in work represents an opportunity for character-strength deployment, we may hypothesize an interaction in which character-strength deployment compensates for poor congruence in enhancing job adjustment.

Purpose and Rationale

The general aim of our study was to explore the potential contribution of constructs deriving from vocational psychology and positive psychology—congruence and character strength, respectively—to satisfaction in one’s work and in one’s life. More specifically, we investigated the relationship of two predictor variables — (a) congruence between previous academic studies and current employment, and (b) deployment of character strengths in current work — on three criterion variables: job satisfaction, career commitment, and personal well-being in life in general.
To examine these associations, we focus on adult employees who are graduates of a college in Israel. To limit the potential variance stemming from inter-institutional differences in this pilot study, we selected graduates of a single academic institution as participants for this study. The issue of congruence between an employee’s previous academic studies and current employment, and the issue of everyday use of character strengths in work (the predictor variables in this study) are relevant for graduates of academic institutions who are at the stage of establishing their careers. At this stage in life, young adults have completed their exploration stage, which is typically characterized by fluctuations, and have not yet entered the maintenance stage, characterized by stability (Super, 1990). Therefore questions pertaining to work satisfaction, career commitment, and personal well-being can be expected to be relevant for this population.

**Method**

**Participants**

Participants were 85 graduates of an Israeli college who were employed at the time of the study. Of these, 94.7% had earned a bachelor’s degree, and the remaining graduates (5.3%) were graduate students at the same institution at the time of the study. The vast majority (98.0%) had completed their degrees at the college in the decade between 1998 and 2008. One-half of the participants were graduates of the institution’s various engineering faculties (51.1%), while the remainder graduated from the Faculty of Humanities and Social Sciences. Over one-half of the participants (54%) were female, almost three quarters (74%) of the participants were married, and the average age of the participants was 32.7 (SD = 6.80). The majority of participants (87.2%) were born in Israel, while the remainder had immigrated to Israel from various countries between 1970 and 1996. Based on participants’ place of residence, 23%, 55.4%, and 21.6% of the participants were classified as belonging to low, moderate, and high socio-economic environments, respectively. Participants were classified by their current occupation as follows: engineers, and employees in hi-tech and industry (40.5%); managerial positions (16.2%); education, welfare, and healthcare (14.9%); public sector employees (23.0%); and security-related occupations (5.4%).

**Instruments**

The self-report questionnaire contained six sections.

**Congruence.** As recommended by Lent (2008), a specific and subjective measure was used. In this study, the measure comprised the following single item: “To what degree is your current job (position) related to the field you studied at the college?” Responses were given on a 5-point Likert scale, ranging from 1 (very little) to 5 (very much).

**Strengths Deployment.** A measure of deployment of character strengths in occupational activities was compiled for the present study. We first presented short descriptions of the 24 character strengths, as they appear in the Hebrew translation of Seligman’s book *Authentic Happiness* (Seligman, 2002), and then presented the names of the 24 strengths. Respondents were asked to reflect on their current job and indicate the extent to which they have “opportunity in your daily work to deploy each strength.” Items were rated from 1 (very little) to 5 (very much). Deployment of character strengths is the average of all item scores. Scores ranged from 1 to 5 (α = .90).

**Job Satisfaction.** This criterion variable was measured by the Short-Form Minnesota Satisfaction Questionnaire (MSQ), which was developed by the Work Adjustment Project (Lofquist & Dawis, 1969; Weiss, Dawis, England, & Lofquist, 1967). The Short-Form MSQ consists of 20 of the original 100 MSQ items that best represent each of the following 20 job dimensions: Ability Utilization, Achievement, Activity, Advancement, Authority, Company Policies and Practices, Compensation, Coworkers, Creativity, Independence, Moral Values, Recognition, Responsibility, Security, Social Service, Social Status, Supervision–Human Relations, Supervision–Technical, Variety, and Working conditions. Participants rate their satisfaction with each dimension on a 5-point Likert scale from 1 (very dissatisfied) to 5 (very satisfied). Job Satisfaction is the average of all item scores. Scores ranged from 1 to 5 (α = .94).

**Career Commitment.** The Career Commitment Scale (Blau, 1985, 1988) scale comprises seven items that express commitment to a career or profession (e.g., “It is the ideal occupation for a life work.” “I like this occupation too well to give it up.”). Responses are given on a 5-point Likert scale from 1 (not true for my career)
to 5 (very true for my career). Career Commitment is the average of all item scores. Scores ranged from 1 to 5 ($\alpha = .83$).

**Well-being.** The Mental Health Inventory (MHI; Veit & Ware, 1983) is a structured, self-report questionnaire developed as part of the National Health Insurance Study. Factor analytic evidence supports the structure of the scale, and the possibility of using higher-order factor scores (distress and well-being) in the original version (Veit & Ware, 1983) and the Hebrew version used in the present study (Florian & Druri, 1990). We used only the psychological well-being scale, which includes 16 items referring to the participant’s feelings over the last month (e.g., “I feel that the future is promising and full of hope.”). Items were rated from 1 (none of the time/not satisfied at all) to 5 (all the time/very satisfied), with total scale scores ranging from 16 to 80. Both the original questionnaire (Veit & Ware, 1983) and the Hebrew translation (Florian & Drori, 1990) reported high reliability as measured by Cronbach’s alpha ($\alpha = .94$ and .96 respectively). Well-being is the average of all item scores. Scores ranged from 1 to 5 ($\alpha = .92$).

**Demographics.** A demographic questionnaire included items pertaining to age, gender, marital status, country of birth, town of residence, academic program and year of graduation, and current employment. Town of residence information was used to classify participants into SES groups, as described below. Graduates completed several additional questionnaires not included in the current study.

**Procedure**

In 2008, three strategies were used to contact and enroll prospective participants from among the graduates of an academic institution. The first two enrollment strategies (direct mail and telephone solicitation, and distribution of an e-mail) generated a very poor response rate: Only 30 of the 600 (5%) distributed questionnaires were returned. Finally, researchers enrolled potential participants at an alumni conference, where alumni were asked whether they are currently employed and willing to complete a questionnaire pertaining to their character strengths. Of the 120 alumni conference participants, 58 agreed to participate in the study (48.3%). Three questionnaires were not completed and therefore eliminated from the study. Thus the study sample comprised a total of 85 alumni. The third strategy was more successful as graduates who attended the conference may have been more committed to the college and therefore more willing to participate in affiliated research projects.

**Results**

Preliminary tests involving several demographic variables were performed before testing the study hypotheses. Scores on all five study variables did not differ by gender, age, socio-economic status, or marital status. A two-way analysis of variance between gender and faculty of studies indicated that engineering graduates reported greater study–work congruence ($M = 3.84$, $SD = 1.20$) than did humanities or social studies graduates ($M = 3.00$, $SD = 1.51$) [$F(1, 86) = 4.07, p < .05$]. This test was performed since a significant difference emerged in the gender distribution of graduates by faculty: Males accounted for 73.3% of the participating engineering graduates, yet accounted for 25.6% of the participating humanities and social sciences graduates ($\chi^2 = 20.02$, significant at $p = .001$).

Means per item, standard deviations, internal consistencies of the research variables, and Pearson correlations, are presented in Table 1. Inspection of correlations in Table 1 indicates that (a) congruence and character-strength deployment are weakly related to one another; (b) congruence and character-strength deployment are each moderately related to different sets of the criterion variables of work adjustment and personal well-being. More specifically, both are related to job satisfaction, while congruence is related to career commitment, but not to personal well-being, while character-strength deployment is related to personal well-being, but not to career commitment.

A series of multivariate hierarchical regression analyses performed on job satisfaction is summarized in Table 2. In the first regression, character-strength deployment was entered first and congruence second; in the second regression, the order of entry was reversed. The two predictors account for 39.5% of the observed variance of job satisfaction, with each predictor making its own independent contribution. When congruence is entered first, it accounts for 17.4% of the observed variance and character-strength deployment accounts for an additional 22.1%; in other words, each predictor accounts for approximately the same percentage of explained variance.
In contrast, when character-strength deployment is entered first, it accounts for three times as much variance as
the variance explained by congruence (29.7% versus 9.8%).

<< Insert Table 2 here >>

A hypothesized interaction of the two predictor variables on job satisfaction was examined by a step-wise
hierarchical regression in which the effects of character-strength deployment and congruence were entered first,
followed by the interaction term. These variables were entered after transformation into standardized scores
(Cohen, Cohen, West, & Aiken, 2003), but no interaction effect was found.

Discussion

Congruence and Character-Strength Deployment: Common and Divergent Effects

The results of the present study indicate that character-strength deployment has a strong relationship with job
satisfaction, which is as strong as, if not stronger than, its relationship with congruence. This finding in and of
itself breaks new theoretical ground in the field of vocational psychology and in the field of positive psychology
by indicating the potential for connecting the two theories. More specifically, findings demonstrate that (a) the
character strengths that workers deploy in their respective work settings contribute both to job satisfaction and to
personal well-being; and (b) job satisfaction is related both to a relatively new construct derived from positive
psychology and to a well-documented construct in vocational psychology. Constructs from both fields may jointly
offer an account for work and life outcomes that is superior to the account offered by constructs from either field
separately.

While congruence and character-strength deployment both contribute to job satisfaction, they do not make
equivalent contributions to career commitment or to personal well-being. Congruence makes a significant
contribution to career commitment, but no contribution to personal well-being, while the reverse is true for
character-strength deployment. These differences may be attributed to differences between development/growth
processes and maintenance processes. Higgins (1998) proposed that individual behavior is controlled by two
distinct self-regulatory systems, each oriented to promotion or maintenance. When promotion-focused self-
regulatory processes are activated, individuals’ growth and development needs motivate them to bring themselves
into alignment with their perceived ideal selves. If we regard character-strength deployment as an expression of
growth and personal development, and a search for new experiences, then its relationship with personal well-
being follows. Employees who are able to deploy their better selves in their work experience a greater sense of
self-fulfillment and consequently greater personal well-being than workers who lack the relevant strengths or the
opportunity to do so in their work place. When maintenance-focused self-regulatory processes are activated,
individuals’ security needs prompt them to bring themselves into alignment with their “ought selves”, or what
they perceive is expected of them. If we regard congruence of present interests and personality traits with ought
selves, it follows that congruence will be associated with commitment to one’s current employment. Stronger
congruence will be more strongly associated with greater commitment than weaker congruence.

The findings of the present study have practical implications for the field of career counseling. In view of the
strong associations that emerge from the present study between everyday character-strength deployment in work,
work satisfaction, and personal well-being, career counselors are advised to develop in-depth understanding of the
field of character strengths. This field has developed in the recent decade through positive psychology and
through large-sample work satisfaction studies by Gallup. Career counselors are thus advised to add the relevant
diagnostic instruments to their professional toolbox, and can select between use of the VIA-IS on 24 character
strengths (Peterson & Seligman, 2004) or the StrengthsFinder questionnaire, which measures 34 vocational
themes and strengths (Buckingham & Clifton, 2001).

Although the present study used the VIA-IS, which measures general personal traits such as curiosity, generosity,
and appreciation of beauty, the conclusions of the present study may be assumed to apply with equal, if not
greater, success to the vocational themes and traits measured by StrengthsFinder, a questionnaire that was
developed specifically for vocational environments and the world of work. Findings of the present study show
that the more employees use their strengths at work, the more satisfied they are with their work, and the greater
well-being they experience in their lives. Career counselors are therefore advised to acquire skills in diagnosing
character strengths and to encourage clients to find ways to use their character strengths at work on a daily basis.
Career counselors should continue to encourage congruence between clients’ fields of study and professional training and their work, because findings of this study, following many previous studies, indicate that congruence contributes to work satisfaction and specifically to work commitment. Nonetheless, individuals occasionally are unable to gain employment in a job that is congruent with their previous training or studies, for various reasons. In such cases, career counselors should help clients identify and even create opportunities to deploy their character strengths within their current work circumstances. The participants in the present study graduated from an academic institution located in an area with limited employment opportunities. In such circumstances, graduates may find themselves without employment in their occupational field in the area, and may be prevented from relocating due to various personal factors. In such cases, career counselors can help graduates identify employment opportunities for expressing their character strengths. Practical implication of the findings of our study pertains to self-regulation. It is advised to identity clients’ dominant self-regulatory focus. For clients with a promotion-oriented self-regulatory focus, it is advised to counsel the client to emphasize character-strength deployment to promote personal growth and renewal. For clients who have a maintenance-oriented self-regulatory focus, it is advised to guide clients to emphasize consistency and congruence between previous studies and current work, in order to maintain and reinforce existing strengths.

Congruence: Subjective, Specific, and Single Item

One might caution against subjective measures of congruence and criterion measures and insist that some, if not all, be based on objective rather than subjective measures. Congruence studies typically assess fit by comparing individuals’ measured values or interests with separately obtained indices of the reinforcement patterns or interest profiles of their work environment or occupational category, respectively. Typically, objective congruence reflects two scores, one of the person and one of the environment. In some cases, however, there are special advantages to using wholly subjective and specific predictor and criterion measures. The decision in the present study to base congruence on a subjective specific measure of one’s current job is consistent with meta-analytic findings (Kristof-Brown, Zimmerman, & Johnson, 2005). These researchers conclude that subjective congruence measures with reference to specific jobs or work tasks are more strongly correlated with job satisfaction ($r = .56$) than congruence measures with reference to broader categories of job or work tasks ($r$ ranging from .31 to .44). Moreover, subjective measures of congruence have been strongly associated with adverse consequences of lack of congruence, including chronic stress reactions and illness (Edwards & Rothard, 2005). In a comprehensive up-to-date review of the literature on this topic, Lent (2008) concluded that the use of subjective and specific measures of congruence is an acceptable and, in some instances, a preferable research strategy.

On the other hand, the decision to base congruence on a single item — a contemporary, personally specific assessment of one’s current work in relation to one’s prior academic training — may be subject to criticism. One may raise legitimate concerns over the use of a single item to represent congruence, a key predictor variable. Nevertheless, the conclusions that were based on congruence assessed by a single item would appear to suggest that the item possesses a high degree of concurrent as well as construct validity. The implications of this limitation are that it is not possible to identify the specific parts of academic studies that are or are not congruent with the current work. For example, graduates who report low congruence may have meant that excessive emphasis was placed on theoretical materials during studies, or that theoretical studies were not sufficiently relevant or up-to-date, or that they acquired insufficient practical tools to engage in the profession acquired. It is recommended, therefore, in future research, to use congruence measures that comprise more than a single judgment or observation, whether such research is based on subjective or objective data.

Limitations and Challenges

We acknowledge several limitations of the present research. First, we were not able to assess whether participants lacked the requisite strengths or lacked the opportunity to deploy their strengths in their current job. Second, the present study was not a longitudinal study and therefore its findings cannot provide insights on the impact of changes in the extent of study–work congruence or character-strength deployment on changes in work satisfaction, career commitment, or personal well-being. Third, one may also question the validity of a self-report questionnaire about character strength employment since self-aggrandizing response biases may affect the accuracy with which participants report their deployment of character strengths in their work.
Fourth, we also acknowledge that we have not demonstrated in the present research that high congruence and deployment of character strengths predict high achievements or productivity on the job. Fifth, the failure to obtain the hypothesized interaction effect between congruence and character-strength deployment on job satisfaction or on the other criterion variables may be due to any one of the acknowledged methodological limitations of the present study. On the other hand, it may be due to faulty theorizing: character-strength deployment may enhance the effect of congruence on job satisfaction, but not necessarily compensate for lack of congruence. The same may be true of a hypothesized compensatory effect of congruence in workers with low character-strength deployment. Finally, the demographic features of the sample used in this study may be the source of a potential limitation of the current research. This is a sample of graduates of a single college, in their 30s, most of whom are married and were born in Israel. The homogeneous nature of the sample decreases our ability to generalize conclusions to other populations of different ages, levels of educational attainment, marital statuses, and length of employment. Although length of employment was not examined in this study, participants’ age and year of graduation provide an indication of potential length of employment. Length of employment may influence the findings and therefore different findings may emerge for older participants with more experience at work.

These limitations highlight the importance of future, more rigorous research on the relationships investigated in the present research. We conclude by pointing out that vocational psychology and positive psychology share a common focus on the study of positive outcomes in work and life. Positive psychology seeks to identify situations or areas of life that enable or encourage character-strength deployment (Duckworth et al., 2005), attributing positive outcomes to the extent of character-strength deployment. Vocational psychology attributes positive work outcomes to the degree of congruence between the individual’s needs, skills, and motivations and the demands and challenges on the job. An integration of constructs and methodologies in both fields will, we believe, lead to a broader perspective and deeper understanding of positive work and life outcomes and how to achieve them personally and professionally with career counseling clients.

References


Table 1

**Means, Standard Deviations, and Pearson Correlations between Research Variables**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Congruence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Character-Strength Deployment</td>
<td>.23*</td>
<td></td>
<td></td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>3. Job Satisfaction</td>
<td></td>
<td>.42**</td>
<td>.53**</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>4. Career Commitment</td>
<td></td>
<td>.50**</td>
<td></td>
<td>.52**</td>
<td>.83</td>
</tr>
<tr>
<td>5. Personal Well-Being</td>
<td>.11</td>
<td>.43**</td>
<td>.40**</td>
<td>.09</td>
<td>.92</td>
</tr>
</tbody>
</table>

* M

<table>
<thead>
<tr>
<th></th>
<th>3.43</th>
<th>3.64</th>
<th>3.68</th>
<th>3.65</th>
<th>3.87</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.41</td>
<td>0.80</td>
<td>0.80</td>
<td>0.87</td>
<td>0.55</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01.

Note. The bold numbers on the diagonal refer to the internal consistency (Cronbach α) of the respective scales.

Table 2

**Percentage Change in Explained Variance of Job Satisfaction by Congruence and Character-Strength Deployment, by Order of Entry into Regression Equations**

<table>
<thead>
<tr>
<th>Order of entry</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage change of explained variance</td>
</tr>
<tr>
<td></td>
<td>df F&lt;sub&gt;change&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>F&lt;sub&gt;change&lt;/sub&gt;</td>
</tr>
<tr>
<td>1. Congruence</td>
<td>Percentage change of explained variance</td>
</tr>
<tr>
<td></td>
<td>df F&lt;sub&gt;change&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>F&lt;sub&gt;change&lt;/sub&gt;</td>
</tr>
<tr>
<td>1. Character-Strength Deployment</td>
<td>Percentage change of explained variance</td>
</tr>
<tr>
<td></td>
<td>df F&lt;sub&gt;change&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>F&lt;sub&gt;change&lt;/sub&gt;</td>
</tr>
<tr>
<td>2. Congruence</td>
<td>Percentage change of explained variance</td>
</tr>
<tr>
<td></td>
<td>df F&lt;sub&gt;change&lt;/sub&gt;</td>
</tr>
<tr>
<td></td>
<td>F&lt;sub&gt;change&lt;/sub&gt;</td>
</tr>
</tbody>
</table>

*** p < .001.