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Managers' career development recognition in Taiwanese companies

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ABSTRACT

The purpose of this research is to investigate how the interplay between organizational and individual career development (ICD) recognition may have impact on affective commitment. The theoretical framework was proposed according to the social cognitive career theory. Data were collected from 285 benchmark companies' managers in Taiwan using a questionnaire. The paper used structural equation modeling and the results showed that when organizations and individuals share responsibility for the careers of managers and have a good succession planning, the managers are likely to have more successful careers in this global economy. The paper shows the mediating role that succession planning may play in linking cognition of organizational career scripts and ICD to affective commitment. It is original and makes a unique contribution because it combines the individualistic and organizational perspectives concerning the career development with regard to senior managers.

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1. Introduction

Career changes are rapid since the late 1980s and the globalization is not only a context for organizational strategic action, but also provides opportunities for career development to managers (Cappellen & Janssens, 2010). As dictated by technological advancement, occupational life cycles have become shorter, and some occupations have become less stable and less predictable (Hesketh, 2001; Vondracek, 2001). Careers are said to be *boundaryless*, requiring an individual to take responsibility for their own management (Arthur & Rousseau, 1996). Thus, individual career development (ICD) means managers have to utilize opportunities that are available for them to pursue their career goals (Sturges, Conway, Guest, & Liefoghe, 2005), such as by undergoing self-management programs, setting career-related goals, and formulating appropriate strategies to achieve them (Noe, 1996).

Meanwhile, according to social cognitive career theory, many explicit contextual organizational influences are integrated and influence an individual's career choice behavior (Lent, Brown, & Hackett, 1994). Organizational career script (OCS) indicates that the organization will consider the institutional environment to design individual career policies and global career development

projects. This practice can manage and improve the effectiveness of an individual's career, and can satisfy the individual's career path choice (CPC; Cappellen & Janssens, 2010; Orpen, 1994). OCS can provide individual counseling and career discussions between managers and their supervisors, and help to choose career development tools consisting of skills, education, experiences as well as behavioral modification and refinement techniques (Cappellen & Janssens, 2010; Noe, 1996). Therefore, OCS allows individuals to work better and to add value to the company.

Furthermore, high-potential managers are those the company believes are capable of being successful in higher-level managerial positions (Ballinger & Marcel, 2010). Thus, CPC is an individual's decision as to what specific work sequence he or she wants for himself or herself, which will give him or her the chance for the promotion based on individual desires (Baruch, 2004). It usually includes a plan for career path change and support for succession planning (Gutteridge, Leibowitz, & Shore, 1993b). Some studies have shown that there exists a close and reciprocal relationship between OCS, ICD, and affective commitment (London, 1993; Sturges et al., 2005). Scholars and practitioners are particularly interested in understanding how to enhance employees' affective commitment (Grant, Dutton, & Rosso, 2008; Meglino & Korsgaard, 2004; Shepherd, Patzelt, & Wolfe, 2011). Making talent sourcing and career development is a strategic priority to ensure the success of a company (Gunz & Jalland, 1996; Guthridge, Komm, & Lawson, 2008; Jenkins, 2008). However, only limited studies are available that focus on the need to balance OCS and ICD, as well as on the need for CPC for managers in Taiwanese business firms.

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Given this backdrop, this study will establish a comprehensive understanding of the theoretical model among OCS, ICD, CPC, and affective commitment. The results are presented along with a discussion of their implications for organizations.

2. Theoretical background and hypotheses

2.1. Social cognitive career theory

A career development system links organizational needs with individual career needs, and is directed at personal and organizational goals. The key issue is how managers develop their skills in such a way that their personal effectiveness and satisfaction means helping the organization achieve its own strategic objectives (Gutteridge et al., 1993b). The implication of the social cognitive career theory is that many explicit contextual influences are integrated and influence career choice behavior, such as the strength of support and obstacles in the career choice process (Gushue & Whitson, 2006; Lent et al., 1994; Schultheiss, 2009). A person's career choice is the dynamic process of interaction with the environment. Either support or barriers from the environment will lead to a change in choice (Bennett, 2008). Career development activities involve the process of helping individuals plan their careers in concert with an organization's business strategies.

Therefore, learning experiences, self-efficacy, and outcome expectations could be applied to conceptual discussions of the manager's CPC process (Lent et al., 1994; Lent, Brown, & Hackett, 2000; Wright & Perrone, 2008). If managers have good learning experience and establish good career self-management strategies, self-efficacy would increase. Then it is even more encouraged to develop a succession plan, in the belief that they can achieve the expected outcomes. Social cognitive career theory proposed that career choice behavior (for instance, CPC) and career objective choice will be affected by contextual variables (such as OCS) and individual variables (such as ICD in this article; Lent et al., 1994; Rogers & Creed, 2011). Thus, it is appropriate for us to draw on the social cognitive career theory to develop a research framework, which fits in with the research objectives.

2.2. OCSs and CPC

OCS should make managers more aware of their marketable characteristics and possible career paths (Cappellen & Janssens, 2010; Trevor & Nyberg, 2008). Managers are more likely to be motivated to engage in career development activities when their supervisor encourages discussions related to development and career issues, is willing to identify resources to help them with specific problems, and assists them in setting performance and career goals (Noe, 1996).

Accordingly, there are a number of positive environmental conditions, such as practical support for activities or emotional support. These conditions will increase a person's choice (Conger & Fulmer, 2003). By contrast, a nonsupportive environment will limit options (Lent, 2005; Lent et al., 2000; Lent & Brown, 1996). Managers anticipate some kind of career development advice from their supervisors (Sturges, Guest, & Davey, 2000). Organizations may want to design their career development systems in accordance with managers' career orientations and allow the managers to adjust their career paths (Bower, 2007). Organizational career planning will affect career behavior and attitudes (Aryee & Debrah, 1993). Thus, an organization-centered career development will influence corporate succession planning. We therefore hypothesize.

Hypothesis 1: OCS has a significant positive association with CPC

2.3. OCSs and affective commitment

Trevor and Nyberg (2008) argued that in the postdownsizing environment of decaying commitment and satisfaction, career development practices should do more to enhance the utility of alternative employment than to improve current employment utility. London (1993) also proposes that organizational assistance and commitment to career development activities can be instrumental in building long-term attachments of managers to their jobs, and building organizational identification. It is, therefore, reasonable to assume that managers will interpret organizational development and training actions as indications of the personified organization's commitment to their progress, and they will reciprocate accordingly by showing an increased level of loyalty (Allen & Meyer, 1990; Hausknecht, Hiller, & Vance, 2008; Lee & Bruvold, 2003; Shepherd et al., 2011).

A number of studies have emphasized the importance of early experiences in the organization, including provision of training and development, for the establishment of affective commitment (Shepherd et al., 2011; Tannenbaum, Mathieu, Salas, & Cannon-Bowers, 1991). In other words, career development and training activities provided by the organization have been identified as the kinds of "positive" experiences that engender affective commitment during the early years at work. Organizational career growth (career goal progress, professional ability development, promotion speed, and remuneration growth) will affect the occupational commitment (Weng, McElroy, Morrow, & Liu, 2010; Weng & McElroy, 2012). Thus, we hypothesize.

Hypothesis 2: OCS has a significant positive association with affective commitment

2.4. ICD and CPC

Trevor and Nyberg (2008) indicated that at higher levels of ICD that enhance the search for opportunities, such as establishing career resource centers or allowing formal manager assessment, development opportunities may indeed be identified. Thus, managers should enjoy the ease of movement in the job market that alternative employment options bring, and they should be sufficiently responsible to recognize their personal needs, biases, and motives. Knowledge of one's own values and beliefs can serve as a basis for future career decisions and for the development of appropriate career strategies (Aryee, Chay, & Tan, 1994).

Having completed ICD, managers will provide great support to the company's engagements in transferring position planning for a potential employee in order to succeed to higher managerial positions (Power & Rothausen, 2003). Moreover, career planning is an ongoing process whereby an individual has salient career-related beliefs, personal growth initiative, and sets career goals (Eddleston, Baldrige, & Veiga, 2004; Robitschek & Cook, 1999). Finally, individuals identify the means to achieve goals and eventually the career success (Eddleston et al., 2004). The major focus of CPC should be on matching personal goals and opportunities that are realistically available, including planning for career path changes (Trevor & Nyberg, 2008). Thus, we hypothesize.

Hypothesis 3: ICD has a significant positive association with CPC

2.5. ICD and affective commitment

Managers' perceptions of the career opportunities available to them within organizations predict affective commitment (Morris,

Lydka, & O'Creivy, 1993). When an individual finds an opportunity for achievement and a sense of intrinsic reward, he/she develops an organizational identification and commitment to the organization (Tansky & Cohen, 2001). Randall (1987) also points out that low levels of commitment are largely disadvantageous for both the individual and the organization; individual career advancement may be severely hampered, while the organization may suffer from an unstable, disloyal work force. If an individual's career development is successful, then his or his affective commitment will be relatively high. Thus, we hypothesize.

Hypothesis 4: ICD has a significant positive association with affective commitment.

2.6. CPC, affective commitment, and mediating effect

Perceived chances for promotion (succession planning) or chances for career path change have been found to be associated with affective commitment (Zaccaro & Dobbins, 1989). Perception of good career opportunities within an organization and the provision of development activities remain important predictors of affective commitment (Morris et al., 1993). Kennedy (1995) further pointed out that when supervisors implement the job of performance appraisal or career development planning for their subordinates, supervisors want the subordinates to commit their job in the organization.

Work commitment is enhanced by career development and membership because they provide CPCs, which offer future career advancement opportunities (Loscocco, 1990). Rosenbaum (1979) proposed that if individuals pursue the kind of career self-management behavior aimed at developing a career within the organization, such as getting to know influential people, seeking career advice, and drawing attention to their achievements, they send out a signal that they are committed both to the organization and to success in the promotion tournament. Gutteridge, Leibowitz and Shore (1993a) also argued that employers now offer opportunities for growth rather than lifelong security. Thus, career development program efforts have also been linked to greater self-awareness on the part of young adults and greater commitment on their part to improve their work-related skills (Noe, 1996). From these, we hypothesize and illustrate the proposal model. (Fig. 1)

Hypothesis 5: CPC has a significant positive association with affective commitment

Hypothesis 6: CPC mediates the relationship between OCS and organizational affective commitment

Hypothesis 7: CPC mediates the relationship between ICD and affective commitment

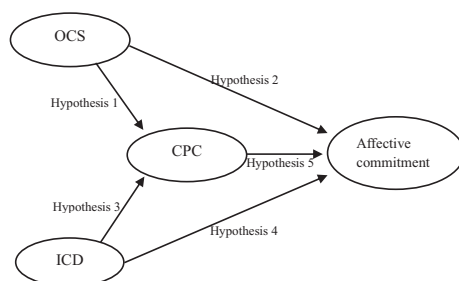


Fig. 1. Proposed model. CPC = career path choice; ICD = individual career development; OCS = organizational career script.

3. Research methodology

3.1. Sample and procedure

The research sample consisted of managers from a number of Taiwanese companies. There are two reasons for this choice. First, traditional Chinese companies were mostly family enterprises in the past, but with the previous generation of business owners getting older, most have passed on their authority to their own children directly. Through nepotism, this centralized power style is achieved by retaining ownership and controlling the organization within a family group (Huang, 1999; Lee, 1996). In recent years, modern management concepts have been introduced into Taiwan from the United States or Europe, with the result that enterprises have gradually begun to place value on succession plans. In this particular context, investigating the career management systems and succession plans of Taiwan's enterprises is valuable.

Second, in recent years, Taiwanese businessmen have eagerly invested in China (Wu, 1997). Especially in terms of mainland China's domestic demand, the market opportunities are expanding rapidly and are very attractive. One of the critical and key factors is Taiwanese managers' future career development, promotion, and culture adjustment in China, as well as their commitment to the organization (Selmer, 2002). The aim of this research is, therefore, to collect and investigate data from many of the professional general managers who form the leadership of Taiwan's internationalized benchmark entrepreneurs.

Greenberg and Baron (2008) argued that formal succession-planning efforts are more likely to occur in large organizations than small ones. Large firms generally have formal plans on record, specifying exactly who will move into certain positions once they are vacated. Thus, the sample for this study consisted of managers in the top 1000 manufacturing, top 500 service, and top 100 finance companies in Taiwan as listed by *CommonWealth Magazine* (2008). Using the stratified sampling method, 800 questionnaires were sent to the firms. Phone calls were made for follow-up. A total of 316 questionnaires were collected, with 285 valid questionnaires (35.6%) remaining after the removal of 31 invalid questionnaires. Of the valid questionnaires, 65.3% were from manufacturing (including the high-tech industry and the conventional manufacturing industry), 23.8% from the service industry, and 10.9% from the financial industry. In sampling, the samples selected for the study are defined by company size (working capital size of more than US\$3.15 million), which is chosen as the control variable for this study.

Of the respondents, 74.7% were men and 25.3% were women, showing that senior management is still dominated by men. In terms of age, the largest number of respondents belonged to the 31–40-year-old age group (51.2%), whereas in terms of duration of tenure, employees with 2–5 years' tenure had the largest number (29.8%), followed by 6–10 years' tenure (27%), which shows that for an average employee who enters an organization there will be great promotion and career advancement opportunities until they reach 31–40 years of age. According to Super (1984), there are five stages of career development. In the establishment stage (26–45 years), people will gain work experiences related to their career choices, and they will try to determine the value of their career choices. Therefore, talented individuals will consider if they really want to pursue that career or not in this stage. If talented individuals learn a lot about their jobs and are satisfied with their career, there will be promotion and career advancement opportunities (Robert & Roger, 2000; Super, 1984). Thus, this sample will also be useful for exploring the research on career development and succession issues.

3.2. Measurement development

OCS was measured using the following three dimensions (Cappellen & Janssens, 2010; Williamson & Otte, 1986): career consultation, role of supervisor, and training and development. The scale was assessed using 15 items. These items were summed to arrive at an OCS score. Responses are indicated on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Examples of items include “My company has provided seminar or information about career consultation or career guidance,” for career consultation; and “Supervisor willing to deal working issues with me frankly,” for role of supervisor; and “When employees complete training, they can be promoted to higher position,” for training and development. Alpha reliabilities were 0.956 for OCS.

ICD was measured using eight items developed by Orpen (1994), covering the following two dimensions: career self-management strategies and career advancement opportunity. These two indices were measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree), with sample items such as “I have definite goals for my career over my lifetime,” for career self-management strategies, and “I try to have as much visibility and exposure to my bosses as I can,” for career advancement opportunity. Alpha reliabilities were 0.7 for career self-management strategies and 0.68 for career advancement opportunity (Orpen, 1994).

CPC was measured using eight items developed by Gutteridge et al. (1993b). We used items that covered the two dimensions of career path: plan for career path change and support for succession planning. These two indices were measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree), with sample items such as “Company creates or introduces new job opportunity for me and encourages me to try,” for plan for career path change, and “Supporting company trains reserved manager by rotation for promoting position in the future,” for support for succession planning. Alpha reliabilities were 0.7 for CPC.

Affective commitment was measured and proposed by Allen and Meyer (1990). This eight-item questionnaire was designed to measure the degree to which the individuals feel committed to their organization. Responses are indicated on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree), with such items as “I have very high loyalty to the company.”

3.3. Construct analysis

Table 1 presents the result of the confirmatory factor analysis. Chi-square difference tests indicated that the hypothesized four-factor model (i.e., OCS, ICD, CPC, and affective commitment) provides a better fit for the data than did (1) the one-factor model, $\Delta\chi^2$

Table 1
Results of confirmatory factor analysis of study variables (N = 285).

Model	χ^2	df	$\Delta\chi^2$	CFI	IFI	NFI	SRMR
Null model	5842.30	1034					
Hypothesized four-factor model	129.24	29		0.924	0.925	0.905	0.031
One-factor model	427.50	35	298.26 ^a	0.702	0.704	0.686	0.063
Two-factor model	338.93	34	209.69 ^a	0.768	0.770	0.751	0.053
Three-factor model	246.72	32	117.48 ^a	0.837	0.838	0.819	0.043

For the one-factor model, all seven constructs are combined into one factor; for the two-factor model, the OCS and ICD (individual career development) are combined into one factor, and CPC and affective commitment are combined into another factor; for the three-factor model, OCS and ICD are combined into one factor. CFI = comparative fit index; CPC = career path choice; IFI = incremental fit index; NFI = normal fit index; OCS = organizational career script; SRMR = standardized root-mean-square residual.

^a $p < 0.01$.

(N = 285) = 427.5, $p < 0.01$; (2) the two-factor model, $\Delta\chi^2 = 338.93$, $p < 0.01$; and (3) the three-factor model, $\Delta\chi^2 = 246.72$, $p < 0.01$. These results suggest that the present study's constructs were distinct.

We also assessed each construct's reliability based on composite reliability and variance-extracted measure (VE; Hair, Anderson, Tatham, & Black, 1998). The results (Table 2) showed that all construct reliabilities and VE measures were above the cutoff values of 0.70 and 0.05 (Hair et al., 1998).

3.4. Results

Table 3 presents the subdimensions' alpha reliability, means, standard deviations, and corrections observed from the survey. The values of Cronbach alpha (α) ranges from 0.782 to 0.97, which are all well above the 0.70 limit and show that the model had good reliability (Nunnally & Bernstein, 1994). The correlations among the dimensions of OCS range from 0.58 to 0.64, which show that the three dimensions measure different facets of OCS. The correlations among ICD (career advancement opportunity and career self-management strategies), career path (plan for career path change and support for succession planning), and affective commitment measures range from 0.12 to 0.64.

We examined the overall fit of the model using several fit indices (Table 4). Our model has an adequate fit with the data, as indicated by the Chi-square/df value of 4.242. The goodness-of-fit index (GFI) assesses how well the hypothesized model reproduces the sample data without the reference model. A good GFI should be 0.9 or higher. Our model's GFI of 0.928 thus shows a good fit (adjusted GFI = 0.864). Segars and Grover (1993) and Chau and Hu (2001) proposed that an adaptive standard above 0.8 displays an acceptable degree of overall adaptation. In addition, the comparative fit index (0.928), normal fit index (0.909), mean-square residual (0.028), and root-mean-square error of approximation (0.107) all suggest that our model fits the data well.

Table 4 and Fig. 2 provide the maximum likelihood parameter estimates for this research model. Based on data in Table 4, we found that the OCS had a significant positive influence on CPC ($\gamma_{11} = 0.379$, $p < 0.001$), which supports Hypothesis 1. OCS can help managers develop greater career maturity and find more opportunities for professional development within their present firms (Feldman, 2003).

The OCS has a significant effect on affective commitment ($\gamma_{12} = 0.155$, $p < 0.05$), indicating that if managers' perception of organizational career-related practices is flawless, it influences their psychological attachment to the organization and positively affects affective commitment, thus supporting Hypothesis 2. Managers' perceptions of career-related practices influence their psychological attachment to the organization and enhance affective commitment.

Meanwhile, ICD appears to have a significant effect on CPC ($\gamma_{21} = 0.442$, $p < 0.001$), which supports Hypothesis 3. It indicates that managers should be responsible for knowing their own occupational needs, motivations, values, and beliefs. This

Table 2
Measurement properties.

Construct	Composite reliability	Variance extracted	No. of items
OCS	0.96	0.89	15
ICD	0.95	0.92	8
CPC	0.96	0.93	8
Affective commitment	0.97	0.93	8

CPC = career path choice; ICD = individual career development; OCS = organizational career script.

Table 3
Alpha reliability, mean, standard deviations, and correlations for all variables ($N = 285$).

Latent variables	Measured variables	Alpha reliability	M	SD	1	2	3	4	5	6	7	8
OCS	1. Career consultation	0.856	2.56	0.87	1.00							
	2. The role of supervisor	0.892	3.12	0.85	0.64 ^a	1.00						
	3. Training and development	0.836	3.24	0.74	0.61 ^a	0.58 ^a	1.00					
CPC	4. Plan for career path change	0.867	3.56	0.76	0.42 ^a	0.46 ^a	0.38 ^a	1.00				
	5. Support for succession planning	0.873	3.84	0.74	0.26 ^a	0.39 ^a	0.36 ^a	0.64 ^a	1.00			
ICD	6. Self-development programs	0.782	4.02	0.58	0.12 ^a	0.28 ^a	0.26 ^a	0.32 ^a	0.37 ^a	1.00		
	7. Career advancement opportunity	0.802	3.98	0.55	0.16 ^a	0.42 ^a	0.37 ^a	0.39 ^a	0.43 ^a	0.55 ^a	1.00	
Affective commitment	8. Affective commitment	0.97	4.00	0.70	0.28 ^a	0.41 ^a	0.43 ^a	0.44 ^a	0.55 ^a	0.38 ^a	0.47 ^a	1.00

CPC = career path choice; ICD = individual career development; M = mean; OCS = organizational career script; SD = standard deviation.

^a p (two tailed) < 0.01.

knowledge can serve as a basis for future career decisions and for the development of appropriate career strategies. In addition, ICD has a significant positive effect on affective commitment ($\gamma_{22} = 0.343$, $p < 0.001$), supporting Hypothesis 4. Good career self-management and perceptions of career opportunity will enhance talented individuals' affective commitment. Lastly, this research found that CPC has a significant positive effect on affective commitment ($\beta_{12} = 0.371$, $p < 0.001$), supporting Hypothesis 5. Perception of succession planning and career development activities remain important predictors of affective commitment.

Fig. 2 depicts the results of the path analysis and demonstrates the relationship between the exogenous and endogenous variables. As shown in the figure, OCS has a direct effect on affective commitment. At the same time, OCS also has a direct effect on CPC, and CPC has a direct effect on affective commitment. The Sobel test shows that OCS has a significant indirect effect on affective commitment ($t = 2.97$, $p < 0.01$), in which the indirect influence is 0.14 ($\gamma_{11}\beta_{12} = 0.379 \times 0.371$). Thus, OCS appears to increase the affective commitment through CPC, supporting Hypothesis 6. ICD

has a direct effect on CPC. Using the Sobel test, we found that the ICD has a significant indirect effect on affective commitment ($t = 3.01$, $p < 0.01$), in which the indirect influence is 0.164 ($\gamma_{21}\beta_{12} = 0.442 \times 0.371$). Obviously, the ICD will affect affective commitment through the mediating effects of CPC. Thus, Hypothesis 7 was supported.

4. Discussion

This research investigated the relationship among OCS, ICD, CPC, and affective commitment. Simultaneously, we explored the mediating effect of CPC. Organizations may want to design their career development systems in accordance with managers' career orientations and allow managers to adjust their own career paths. Furthermore, managers interpret OCS as indicative of the personified organization's commitment to them, and therefore, reciprocate accordingly by showing an increased level of loyalty (Lee & Bruvold, 2003). ICD has to satisfy both the opportunity to fulfill one's career potential and one's career development through promotion or support for succession planning (Aryee et al., 1994; Trevor & Nyberg, 2008). Furthermore, managers' perceptions of opportunity for achievement, which gives them a sense of intrinsic reward, are an important antecedent to affective commitment (Morris et al., 1993; Shepherd et al., 2011; Tansky & Cohen, 2001).

Accordingly, when managers' perceive well-developed OCS, they are likely to consider and execute ICD plan at the same time. This echoes the idea of the social cognitive career theory, that is, many explicit environmental contextual factors influence the manager's career choice behavior. If these two, OCS and ICD, fit very well, they will perfectly deliver the CPC, thus supporting the succession planning. Eventually, these will positively affect affective commitment.

4.1. Limitations

This study is based on the related literature and a theoretical framework was developed according to the social cognitive career theory. In the research process, efforts were made to achieve an objective and rigorous outcome, but there are still several limitations to this study. First, obtaining complete records for enterprise managers is not a simple task. Despite the confirmation and obtaining as many samples as possible, this study uses only a representative sample of benchmark firms, including those from the high-tech, conventional manufacturing, service, and financial industries. Moreover, we were unable to complete the investigation of other industrial managers.

Second, the questionnaire respondents in this study were managers, and their level of understanding of the items and subjective awareness could affect the responses. Therefore, a bias phenomenon may affect the results.

Table 4
Results of the structural equation modeling testing.

1. Measurement model	Direct effects	
OCS → Career consultation	0.766 ^a	
OCS → The role of supervisor	0.816 ^a	
OCS → Training and development	0.757 ^a	
ICD → Career self-management strategies	0.66 ^a	
ICD → Career advancement opportunity	0.834 ^a	
CPC → Plan for career path change	0.767 ^a	
CPC → Support for succession planning	0.834 ^a	
Affective commitment → Affective commitment	0.908 ^a	
2. Key parameter estimates		
Hypothesized paths	Direct effects	CR
OCS → CPC (γ_{11})	0.379	4.8 ^a
OCS → Affective commitment (γ_{12})	0.155	2.064 ^b
ICDC → CPC (γ_{21})	0.442	4.984 ^a
ICDC → Affective commitment (γ_{22})	0.343	3.668 ^a
CPC → Affective commitment (β_{12})	0.371	3.774 ^a
3. Fit indices for the structural model		
Chi-square = 123.004		
GFI = 0.928		
AGFI = 0.864		
RMR = 0.028		
RMSEA = 0.107		
CFI = 0.928		
NFI = 0.909		

AGFI = goodness-of-fit index; CFI = comparative fit index; CPC = career path choice; GFI = goodness-of-fit index; ICD = individual career development; NFI = normal fit index; OCS = organizational career script; RMR = mean-square residual; RMSEA = root-mean-square error of approximation.

Using a significance level of 0.05, critical ratios (CRs) that exceed 1.96 are considered significant.

^a CR > 3.29.

^b CR > 1.96.

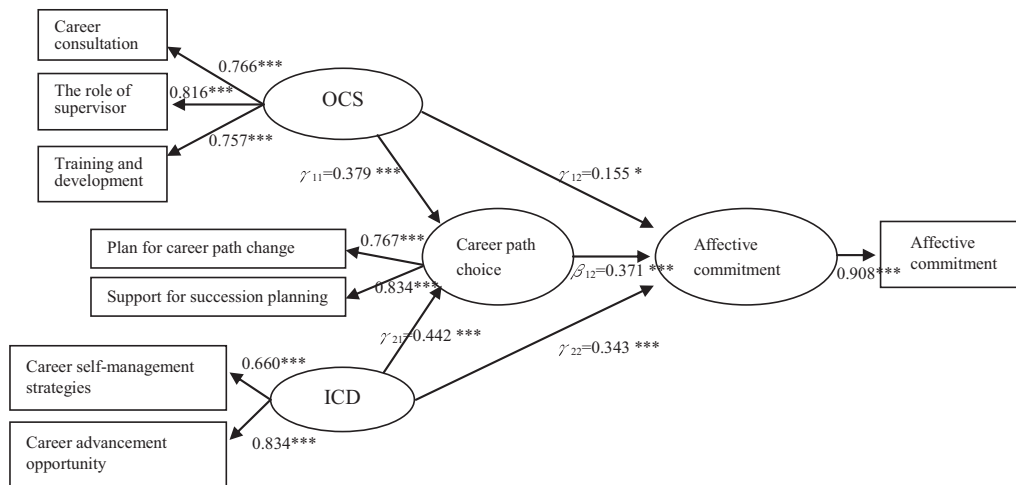


Fig. 2. Structural equation model. * p (two tailed) < 0.05; *** p (two tailed) < 0.001. ICD = individual career development; OCS = organizational career script; β = coefficient matrix between the endogenous latent variables; γ = coefficient matrix between the endogenous latent variable and the exogenous latent variable.

4.2. Conclusions and implications

According to this research, if a company offers more training and development programs, and if the supervisor can provide assistance, then the managers will acquire the experience needed to undertake a special task and to plan for a career path change. With the essential assistance offered by their supervisors, the managers hope to develop their core competencies to match the organizational strategy, including job rotation plans and succession planning (Rothwell, 2011). Furthermore, if the company offers more training and career consultations, and if there is more assistance from supervisors, the managers will put more effort to help the organization achieve its goals and will have a higher emotional investment and attachment to the organization.

Managers have opportunities for career advancement, and career self-management strategies will be an advantage in planning career path changes. If the manager is aware of personal occupational opportunities and career self-management strategies, he/she will identify himself/herself more with the company and exert more effort to help the organization achieve its goals.

With this backdrop, as companies change their structure, partly in consideration of technological changes, managers will accept that uncertainty and change are a fact of life in organizations. Organizational restructuring has largely influenced a new orientation toward OCS, and has provided rich opportunities for career development. Many human resources professionals have advocated the use of career development and development systems for improving managers' career motivation and commitment, awareness of the purported link between career development, performance, developmental behavior, and participation in development activities (Betz, 2001; Noe, 1996).

Thus, when organizations and individuals share responsibility for the careers of managers, the managers are likely to have more successful careers. Some organizations have been relying on career development interventions to avoid the problems associated with career plateaus and other career-related issues, such as finding the right job or adjusting to new jobs. These interventions are systematic efforts to help manage people's careers while simultaneously helping the organizations in which they work (Greenberg & Baron, 2008; Orpen, 1994).

4.3. Suggestions

This study suggests that a company must help establish the core competencies of its managers so they can deliver what is expected

of them. A company should bear in mind that ICD and organizational development should be consistent with each other. A company must assist the managers in planning ICD and providing training to help achieve the individual's career plans.

Moreover, decision makers (or top management teams) should develop appropriate succession planning. A company should value its talented individuals and design CPC opportunities for them. When the organization executes the career development plan and links it with the succession planning integrated into the organizational vision, the managers will be able to demonstrate in the future the performance required of them. Therefore, succession planning is the basis for a company to move toward sustainable development.

Finally, further research may suggest other key factors for effective succession planning. Future studies may adopt this case study to analyze succession planning. Further research can also investigate the relationship and interaction between OCS and ICD, and determine the good fit index between organizational plans of career path and individual cognition of career development.

Conflicts of interest

All contributing authors declare no conflicts of interest.

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