

THE INTERACTIVE EFFECTS OF SELF-EFFICACY AND INFORMAL ACCOUNTABILITY FOR OTHERS ON CAREER ENGAGEMENT

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ABSTRACT

This research examines the relationship between self-efficacy, informal accountability for others (IAFO) and career engagement. Our study enhances organizational research by demonstrating the moderating effect of IAFO on the self-efficacy and career engagement relationship. We test hypotheses using data collected in a convenience sample of 299 working adults. Findings indicate that IAFO moderates the self-efficacy – career engagement relationship such that career engagement decreased when we consider both factors together. The paper concludes with probable managerial and theoretical implications as well as the study's relevant strengths, limitations and directions for future research.

JEL: M10, M12

KEYWORDS: Self-Efficacy, Informal Accountability for Others, Career Engagement

INTRODUCTION

For many decades now, a large American chocolatier has produced a popular confection comprised of a combination of peanut butter coated in chocolate. This candy bar popularly connotes, “two great tastes that taste great together.” As early as 1989, William James called for extending research based on “grounded theory” (Edie, 1987). Ultimately, that means findings must appeal to our primary sense data (i.e., touch, taste, smell, hearing and sight). This research is a modest attempt to investigate the joint effects of two organizationally desirable attributes: self-efficacy and informal accountability for others (IAFO) and their joint influences on career engagement. Metaphorically, we wanted to know if these two attributes are better together.

Globalization has precipitated numerous large-scale downsizings, outsourcings and associated losses of job security. This condition led to fundamental shifts in our models of careers and what it means to be engaged in them (Baruch, 2004, Sullivan & Baruch, 2009, Royle, 2015). These changes lead us away from long-term psychological contracts about our work towards more short-term transactional contracts. A transactional contract alters the relationship between the employee and employer drastically (Herriot & Pemberton, 1966, Rousseau, 1989). Rather than exchanging development opportunities and employment security with a single (or small number of) firm, contemporary career engagement requires that employees maintain flexibility and continuously develop their skills in order to satisfy both the needs of their current employers as well as those of future employers (Herriot & Pemberton, 1966, Baruch, 2004). This has fundamentally reshaped what it means to be career engaged, and this research intends to help illustrate some of those changes.

Prior research demonstrated the impact of accountability and self-efficacy on both individuals' organizational citizenship and political behaviors (Royle, Hall, Hochwarter, Perrewe, & Ferris, 2005). The field accepted that ownership of one's actions (Schlenker, Britt, Pennington, Murphy, & Doherty, 1994), being rewarded or punished for behaviors and feeling capable of overcoming obstacles, promotes desirable outcomes for both firms and individuals (Bandura, 1977, 1997, Cummings & Anton, 1990, Royle et al., 2005). Our research seeks to further science by demonstrating the interactions between constructs related to, but distinct from, the work done by Royle et al., 2005. Of salient interest is the question of what happens when individuals feel accountable for others' behaviors given their own self-efficacy (or lack thereof) and its impact on their engagement in their own careers in a changing environment.

In this research, we propose the following layout: first, we will review the current state of the literature relevant to our study variables. Next, we will discuss our data, the chosen methods of analysis and the results generated. We conclude with a discussion of our findings' implications for theory and practice, potential limitations, directions for future research and a recapitulation of the research's major findings.

LITERATURE REVIEW

The Foundations of Learning Theory

According to Tolman (1951, Klein & Mowrer, 1989), individuals carefully deliberate their actions and the possible outcomes (both positive and negative). As such, individuals make a mental calculus of what they believe is in their best interests and engage behaviors they believe are most likely to have desired consequences. Conversely, they avoid behaviors with negative consequences. In other words, what individuals expect to come from specific behaviors motivates them (Tolman, 1951, Vroom, 1964). This is the basic nature of expectancies (Vroom, 1964). Tolman (1951) proposed that all higher-level biological organisms (e.g., working individuals in this study) are aware of their situations and enact behaviors on past learning history/experience. With respect to employees, he contended that behaviors result from beliefs about the best way to achieve desired goals, although these beliefs work in conjunction with a demonstrated history of associated reward. Management theory prominently groups these relationships (Vroom, 1964, Luthans & Kreitner, 1985, Latham & Huber, 1992, Klein & Mowrer, 1989).

Bandura's (1977, 1997) concept of self-efficacy is an extension of Tolman's (1951) expectancy principle. Bandura's (1977, 1997) social cognitive is one of the most prominent of the learning theories. It proposes that although people can learn through direct experience, they also learn by observing the consequences of the behaviors of others and via symbolic modeling. From both direct and vicarious experiences, individuals learn abstract rules (e.g., "the Golden Rule" – 'do unto others as you would have them do unto you') that, once internalized, generalize to many different, novel, contexts.

Self-Efficacy

Self-efficacy is one's belief that he/she can (or cannot) organize capabilities necessary to achieve desirable outcomes in specific organizational contexts (Bandura, 1977). Accordingly, one's self-efficacy strongly influences how one approaches tasks or goals (Bandura, 1977, 1997, Weiner, 2012). For example, if individuals feel strongly that they can learn a foreign language, they will be more likely to enroll in formal language courses or, perhaps, to accept and complete an expatriate managerial assignment (Eisenberger, Conti-D'Antoni, & Betrando, 2005, Kealey, Protheroe, MacDonald, & Vulpe, 2005). Indeed, self-efficacy can be specific to a situation. Although self-efficacy relates to a single situational context, Bandura (1977, 1997) also contended that individuals possess "coping" self-efficacy; a global, generalized, set of beliefs related to capability. Individuals with higher levels of coping self-efficacy are persistent across time and contexts even under difficult circumstances because they believe their accumulated, prior experiences

instruct them about dealing with initial failure. Additionally, they believe such setbacks are only temporary (Bandura, 1977, 1997, Weiner, 2012).

Bandura (1977, 1997, Weiner, 2012) suggested that efficacy expectations differ in magnitude, strength and generality and that each of these has substantial motivational consequences. Magnitude connotes that individuals' efficacy expectations result from the level of a task's difficulty. Essentially, successes on complex tasks have stronger implications for enhancing individuals' levels of efficacy (Bandura, 1977, 1997). The strength of perceived efficacies also varies. Individuals who believe more strongly that they will master a challenge persevere longer than those with weaker expectations. Finally, individuals' expectations of success differ in generality. Some experiences (e.g., successfully coping with spousal death/divorce or finding further employment after a lay-off) create a generalized sense of enhanced efficacy whereas others (e.g., trouble shooting a personal computer problem) are limited to specific situations (Bandura, 1977, 1997, Weiner, 2012).

Of Bandura's (1997) three dimensions, generality sparked considerable debate in field-relevant literature. According to Bandura (1997), self-efficacy primarily relates to task achievement. According to Bandura (1977, 1997), individuals' senses of content mastery promote self-efficacy. Therefore, the experience of having successfully acquired a skill is likely to foster beliefs that similar learning and, subsequent mastery/success, will occur again in the future. Therefore, in order to predict successful behaviors, self-efficacy measurement must relate to task measurement and definition (Weigand & Stockham, 2000). Self-efficacy then changes, to varying degrees, with both task and environment. Weigand and Stockham (2000) contended that relatively little, by way of efficacy expectations, carries over between tasks. Conversely, other scholars proposed that self-efficacy is a relatively stable, measureable, trait-like feature that predicts individuals' responses across contexts and over extended periods of time (Chen, Gully, Whiteman, & Kilcullen, 2000, Chen, Gully, & Eden, 2001). Given the time parameters of engagement and sheer breadth of contemporary careers, our research focuses mostly on the broader concept of "coping" self-efficacy.

As noted above, interacting with and observing others can also bolster self-efficacy (Bandura, 1977, 1997, Weiner, 2012). This contention has long been a critical driver of social learning theory (Blau, 1964, Thompson, 2010). Seeing others successfully complete tasks promotes individuals' beliefs that they can also learn to do the task (Weiss, 1990, Blau, 1964, Thompson, 2010). Another source of acquiring self-efficacy comes from others' verbal encouragements or discouragements (Weiss, 1990). When individuals have no experience at a particular task receive feedback from others about whether or not they can perform a task, they tend to believe it, for better or worse. Thus, individuals develop commensurate, corresponding, higher or lower levels of self-efficacy (Merton, 1968, Darley & Gross, 2000). These notions form the crux of the self-fulfilling prophecy (Merton, 1968).

Informal Accountability for Others

Informal accountability for others (IAFO) is an observable set of behaviors (e.g., speaking up for a coworker) that indicate individuals' feelings of answerability for the attitudes and behaviors of others in their organizations irrespective of formal position within the firm, rank, or mandate (Royle, Hochwarter, & Hall, 2008, Royle, Fox, & Hochwarter, 2009, Royle & Fox, 2011, Royle & Hall, 2012).

Morrison and Phelps (1999) noted that individuals generally feel personally obligated to enhance the situations of both themselves and others by instigating constructive change. This, either directly or indirectly, influences all relevant constituencies. Another aspect of the IAFO construct comes from Lerner and Tetlock (1992) who defined accountability as the implicit or explicit expectation that individuals might be called on to justify their beliefs, feelings, or actions to others. Both Zimbardo (1970) and Ferris, Mitchell, Canavan, Frink and Hopper (1995), informed this construct by demonstrating that accountability is influenced by whether or not individuals are observed by others with reward/sanctioning power and the

extent to which valued outcomes/sanctions are commensurate with these evaluations. Certainly with respect to traditional views of careers (i.e., work that is stable and predictable), the outcomes associated with accountability (i.e., performance evaluations that assign pay raises, promotions or terminations) strongly predicted career mobility and, thus, engagement (Greenhaus, Callanan & Godshalk, 2010).

Risk and uncertainty avoidance are major theoretical drivers of IAFO. There will always be future unforeseen and uncontrollable events regardless of the individual. Epstein (1999) defined uncertainty aversion as a broad class of preferences that contain future information too imprecise to gauge but that is, nonetheless, perceived to be inevitable. Nevertheless, researchers (e.g., Epstein, 1999, Hofstede, 1980) contended that individuals wish to hedge those risks. People engage in behaviors that they anticipate will reduce future uncertainties to help offset their trepidations. Furthermore, at both the individual and aggregate levels of analyses, both Epstein (1999) and Hofstede (1980) contended that cultures and individuals vary with respect to levels of uncertainty aversion.

Epstein (1999) explained that the notion of risk is similar to uncertainty aversion. However, risk intones that individuals have a more precise idea of the probability of some future event (e.g., a 60/40 chance of success, etc.). In this research, we assume that individuals have only a vague notion of risk given the often discontinuous, churning nature of contemporary employment and career trajectories (Capelli & Neumark, 2002). However, we contend that IAFO can be a way to manage uncertainty and reduce individuals' perceptions of risk.

IAFO is a condition that individuals both feel and, to an extent, choose (Royle et al., 2008). When individuals become informally accountable for others, those others are usually aware of it (Royle et al., 2008). When one speaks up for another, he/she does not do so in a vacuum. Given the norm of reciprocity (Gouldner, 1960, Meyer & Allen, 1997), individuals see that the informally accountable party (e.g., the person advising them or speaking on their behalf) extended a benefit to them and usually feel obligated to align their attitudes or behaviors in order to repay their obligations (Royle et al., 2008). Individuals who are cognizant that another person has been helpful will reciprocate by ensuring that they meet relevant goals or take measures to correct performance decrements. It is reasonable then that IAFO relates to self-efficacy because individuals both observe and interact. Furthermore, informally accountable parties are likely to impart feedback based on how they think others are performing.

Prior research indicated that IAFO promotes positive changes to individuals' contextual performance (Royle et al., 2008). For example, informally accountable parties may enhance their social prestige or be promoted to a position with more formal, objective, authority (Royle et al., 2008). At a minimum, those known to be informally accountable for others enjoy a status differential that enhances their standing in organizations and helps them engage more thoroughly in their careers.

Career Engagement

Contemporary literature on careers strongly emphasizes the need for employees to be self-directed in the management of their careers (Arnold & Jackson, 1997, Norman, Gardner, & Pierce, 2015). We define career engagement as the forward-looking behaviors of employees to find and maintain jobs, occupations and careers that are fulfilling and satisfying (Cox, Rasmussen, & Conrad 2007, Greenhaus, et al, 2010). This connotes a lifelong process that shapes work and, subsequently, careers due to the discretionary actions of individuals (Hirschi & Freund, 2014). Consequentially, proactive career engagement behaviors (e.g., planning, networking and independent exploration) are critical components of engagement and, ultimately, success (Zikic & Klehe, 2006). As such, career engagement (i.e., the degree to which employees proactively exhibit different career behaviors in order to enhance the quality of development of their careers) is of practical, theoretical and organizational importance (Hirschi & Freund, 2014). Fleshing out what its antecedent and moderating conditions are is, thus, useful to science.

Career engagement becomes more important within the broader practice of counseling (Greenhaus et al., 2010). Career counseling, the act of imparting political, practical, step-wise information that individuals use to direct their occupational efforts, is increasingly concerned with stake-holder (e.g., oneself and other employees) enhancement and career management (Greenhaus et al., 2010). We posit that feeling informally accountable for others bolsters counseling and, thus, enhances career engagement. Concomitantly, self-efficacy enhances career engagement because, based on prior successes, individuals feel empowered to make proactive choices, take risks and (hopefully) flourish (Norman et al., 2015).

Also germane to this research is the current prominence of the protean career model. Hall (1976) contended that in modern organizations individuals, rather than firms, manage careers. Thus, their career paths reflect internal drivers aimed at achieving self-fulfillment (Hall, 1976). This career conceptualization transformed the employment relationship from a relational to a transactional psychological contract (Arthur & Rousseau, 1996, Peiperl & Baruch, 1997). This ideological lens accentuates the psychological challenges that confront those who want to remain career engaged in an increasingly unstructured employment environment (Hall, 1976).

Similarly, the boundaryless career construct (Arthur & Rousseau, 1996, Greenhaus et al., 2010) proposed that employees were driven by a yearning for self-fulfillment even if it meant career promotion within a single employer by means of lateral or non-traditional functional avenues of advancement (e.g., becoming CEO from HR instead of sales). Conceptually, both the protean and boundaryless notions of careers are useful in analyzing career engagement because they reflect changes in the employment relationships and underscore the need for those engaged in their careers to take control in an increasingly unstructured environment (Chay & Ayree, 1999). Theoretically, then, those who are well connected and have a sense of accomplishment are more likely to involve themselves in career building activities than those who wait to be given opportunities.

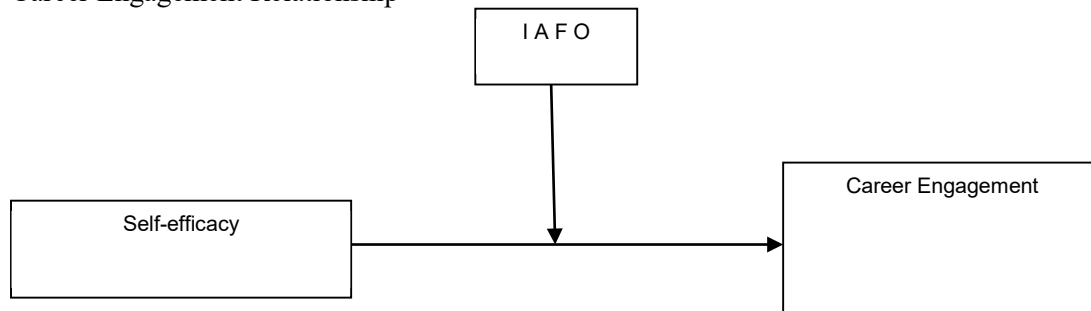
Arthur and Rousseau (1996) as well as Seibert, Kraimer, Holtom and Pierotti (2013) noted that extrinsic and objective measures of career success are not the potent drivers of employee behaviors that they were forty or fifty years ago. Objective career success denotes the presence of quantifiable aspects of employment, such as increases in pay and the number of promotions. Historically, this was the dominant metric of success across countries (Nicholson, 2000). However, the contemporary focus of career advancement comes from perceptions of psychological success (Hall & Foster, 1977, Greenhaus et al., 2010). This view emphasizes the subjective nature of careers and, thus, largely discounts any single measure of achievement. Effectively, when the field broadens its notions of success, concomitantly, it expands the variety of activities necessary for career engagement. Because these engaged activities lay the foundations for eventual success, or lack thereof, a better understanding of the expanded number of antecedent behaviors to career engagement is necessary.

In order to predict success in the protean/boundaryless environment, DeFillippi and Arthur (1994) contended employees utilize three distinct groups of competencies. These career competencies consist of career motivation and identification (knowing-why), marketability (knowing-how) and career-related networking (knowing-whom). When employees in this boundaryless system maintain a high degree of flexibility and are career engaged based on their value systems, they are likely to succeed (Arthur, Hall, & Lawrence, 1996, Gubler, Arnold, & Coombs, 2014). Our research contends that higher levels of self-efficacy promote knowing-how, and that higher levels of IAFO promote knowing-whom and knowing-why, thus, enhancing career engagement.

Although the practical and theoretical dimensions of career engagement exist in current literature, the underlying drivers of career engagement are not yet fully clear (Hirschi & Freund, 2014). Rogers, Creed and Glendon (2008) noted that intra-personal, stable, dimensions like, emotional stability (e.g., Barrick & Mount, 1993) related to decision-making self-efficacy, which along with environmental factors (e.g.,

perceived barriers to entry) impact (positively or negatively) individuals' career investigation behaviors. Furthermore, extant research provides many answers regarding career opportunities, but there remain more questions. Hirschi and Freund (2014) contended that some individuals lend more social support than others do. Thus, they are more engaged in their careers because they act as career counselors. As noted above, those high in IAFO, due to the support they receive from others, are therefore more engaged in their careers. An overview of the conceptual framework and model we tested appears in Figure 1.

Figure 1: The Moderating Effect of Informal Accountability for Others (IAFO) on the Self-Efficacy and Career Engagement Relationship



This is the model of self-efficacy, informal accountability for others and career engagement tested in this research. The driving force for this academic inquiry is the contention that those who expect to achieve on the job are inclined to seek conditions of informal accountability for others in order to promote their careers. However, the magnitude of their career engagement is moderated by the degree to which they feel informally answerable for the behaviors of others at work.

Therefore, by way of synopsis, we submit the following research hypotheses:

Hypothesis 1: Informal accountability for others (IAFO) promotes career engagement.

Hypothesis 2: Self-efficacy promotes career engagement.

Hypothesis 3: Informal accountability for others (IAFO) moderates the relationship between self-efficacy and career engagement such that the impact that IAFO has on career engagement increases as self-efficacy increases.

DATA AND METHODOLOGY

We collected this data set in early 2015. It is a convenience sample gathered from individuals working full time with at least three years of experience. Naturally, we cannot rule out the potentially contaminating effects of comparing multiple organizational contexts and cultures (Schwab, 1999). However, the fluid, unpredictable nature of careers common to our contemporary labor markets (e.g., multiple employers and potential lay-offs) might make our conclusions more applicable to a broad cross section of employees (Baruch, 2004, Greenhaus et al., 2010).

Participants and Procedures

Our data come from a collection effort conducted by the lead researcher between January and June of 2015. Students enrolled in courses in organizational behavior, career development and human resource management received extra credit for their participation. Students meeting our criteria (i.e. adults working full time with three years of experience) could answer questionnaires for themselves. Otherwise, students asked qualified friends or family members to submit responses on their behalves. We used the online analytics software Qualtrics to collect the raw data and for preliminary analyses.

Using this software, we generated a web address that they we then sent to students to disseminate. As might be expected, not all students participated presumably, because they either lacked interest in our research aims or did not need or want the extra credit enough to endure the costs associated with our survey. We collected the names, addresses (both mailing and IP), contact phone numbers and places of employment for all respondents in order to ensure that those participating legitimately met the above criteria (e.g., not students faking answers for extra credit). We reserved the right to contact any respondent if we suspected that their submission was not a good faith effort. Initially, 379 individuals began the survey. Of those, 303 (80%) completed it. Of those 303 submissions, four surveys were not entirely completed so we “list-wise” deleted those responses in subsequent analyses. Therefore, the sample consisted of 299 working individuals. There were 182 female respondents (61%), the average age was 37 and the average organizational tenure was 7.4 years. Typical occupations included nurses, project managers, bankers and sales professionals. The majority of respondents came from Georgia, Florida and Tennessee.

Measures

We conducted confirmatory factor analysis (CFA) on our scales prior to reporting any findings. We measured the degree to which survey items loaded on their expected factors. CFA helps ensure the number of factors and the loadings of measured (indicator) variables are consistent with prior research (Pallant, 2004). Performing CFA also helps address concerns of discriminate validity related to multicollinearity (Schmitt & Sass, 2011, Tabachnik & Fidell, 1996, Schwab, 1999). We performed CFA using an oblique rotation and retained factors using the Kaiser criterion (i.e. keeping only those components with eigenvalues over 1.0) (Schmitt & Sass, 2011, Tabachnik & Fidell, 1996, Kaiser, 1974). We used the direct “oblimin” (oblique) rotation because we believe, theoretically, that these research constructs are related. This study’s correlation results, noted below, support that assumption. Our scales demonstrated their appropriate dimensionality. Analyses indicated a uni-dimensional factor structure for career engagement (eigenvalue = 4.62, proportion of explained variance = 0.58), IAFO (eigenvalue = 3.30, proportion of explained variance = 0.66) and self-efficacy (eigenvalue = 2.51, proportion of explained variance = 0.50). Table 1 presents this consolidated information and lists the scales’ original authors.

Table 1: Scales, Sources, Reliabilities and Factor Analyses

Variable Name	Scale Author	Coefficient α	Eigenvalue of the 1 st Factor	Variance Explained by 1 st Factor
Career Engagement	Hirschi, Freund, & Hermann (2014)	0.71	4.92	0.58
Self-Efficacy	Schwarzer & Jerusalem (1995)	0.73	2.51	0.50
Informal Accountability for Others	Royle, Hochwarter, & Hall (2008)	0.85	3.30	0.66

This table contains information about the study’s variables and the creators of the scales used to measure them. In addition, it reports the coefficient alpha values of each scale in both samples as well as the Eigenvalue of the first extracted factor and the amount of variance that it accounts for. We measured all scales with a five-point Likert-type response format anchored by “strongly disagree” and “strongly agree”.

Control variables. We include several control variables to help reduce spurious effects and strengthen our conclusions. We controlled for age, gender, ethnicity, level of education, income and organizational tenure due to their demonstrated effects in both the contemporary behavioral science and career studies literatures (Podsakoff & MacKenzie, & Podsakoff, 2012, Sheridan & Vredenburg, 1978, Greenhaus et al., 2010).

RESULTS AND DISCUSSION

Table 2 provides the means, standard deviations and correlations between study variables. The single largest correlation between variables in the sample is between age and organizational tenure ($r = 0.63, p < 0.001$). We expected this considering that individuals gain tenure in an organization as they age. Other correlations between study variables are consistent with extant research. None of our study’s correlations indicated a problem of multicollinearity. With the exception of age and organizational tenure, no correlation exceeds the 0.60 threshold established by Cohen, Cohen, West and Aiken (2003).

Table 2: Means, Standard Deviations, and Correlations between Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Age	36.51	13.42	---									
2. Gender	---	---	-0.12	---								
3. Ethnicity	---	---	-0.19	0.08	---							
4. Tenure	7.37	8.02	0.63	-0.06	-0.20	---						
5. Promotions	1.85	0.83	0.26	-0.14	-0.11	0.49	---					
6. Income	4.42	2.23	0.57	-0.29	-0.13	0.38	0.28	---				
7. Education	3.54	0.73	0.24	-0.12	-0.05	0.06	0.01	0.46	---			
8. IAFO	3.69	1.08	0.04	-0.09	-0.07	0.07	0.19	0.18	0.03	---		
9. Career Engage	3.71	0.82	0.03	-0.08	0.08	-0.07	-0.01	0.21	0.27	0.35	---	
10. Self-Efficacy	3.86	1.02	-0.74	-0.03	0.06	-0.03	-0.03	0.14	0.12	0.24	0.36	---

*All bolded correlations indicate significance levels of $p < 0.05$ or stronger. $N = 299$. The means for income and education correspond to an average of approximately 38,000 USD/year and an associate’s degree (2.2 years of education beyond high school) respectively.

We used hierarchical moderated regression to analyze the hypothesized career engagement-IAFO-self-efficacy relationship. In the first step, age, gender, organizational tenure, ethnicity, number of promotions and level of education were included as control variables. We entered the IAFO and self-efficacy main effects terms in the second step, followed by the interactive term (IAFO x self-efficacy) in the third step.

Thus, we used the following hierarchical moderated regression equation to estimate career engagement:

$$Career\ Engagement = \beta_1(Age) + \beta_2(Gender) + \beta_3(Org.\ tenure) + \beta_4(Ethnicity) + \beta_5(Number\ of\ promotions) + \beta_6(Education) + \beta_7(IAFO) + \beta_8(self\text{-}efficacy) + \beta_9(IAFO\ x\ self\text{-}efficacy)$$

Table 3 describes the stepwise regression results. The results indicated that the IAFO x self-efficacy interaction term predicted career engagement ($b = -0.34, p < .05; \Delta R^2 = 0.02$). A moderating interaction term that explains this amount of variance is both empirically significant and worthy of further explanation (Diekmann, Blickle, Hafner, & Peters, 2015, Champoux & Peters, 1987).

Per the calculations for slope coefficients, low self-efficacy was statistically significant ($t = 4.04, p > 0.001$). The slope for those high in self-efficacy was significant ($t = 6.09, p < 0.001$).

As indicated in Table 3, the direct effects of both IAFO ($b = .51, p < 0.001$) and self-efficacy ($b = 0.43, p < 0.001$) are statistically significant predictors of career engagement. Self-efficacy and IAFO represent 0.23 of the total variance in the model and constitute an increase of 0.15 in the variance explained beyond the control variables. These results supported hypotheses 1 and 2.

Our research partially corroborates our third hypothesis regarding the influence of the interaction term IAFO x self-efficacy. The interaction with a -0.168 coefficient (explains 16.8% of the variance) indicates that the extent to which IAFO or self-efficacy aids in career engagement decreases when both factors are considered. However, combining them is a net positive effect as witnessed by the 4.61 out of 5 average score for career engagement when an employee possesses both factors. The results further indicate that self-efficacy (32.8%) has a slightly stronger impact on career engagement than IAFO (21.5%). Our results suggest that higher self-efficacy decreases engagement given higher informal accountability for others. The more individuals feel universally capable, the less attractive being informally accountable for others becomes.

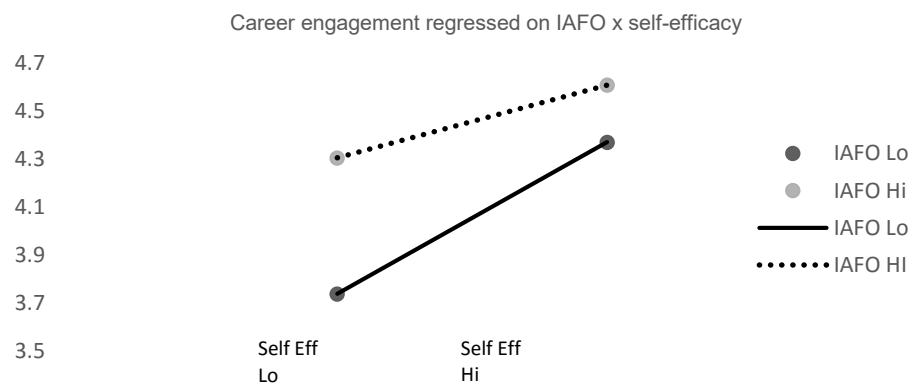
Table 3: Hierarchical Moderated Regression Results Testing the Effects of Independent Variables on Informal Career Engagement

Step and Variable	β	ΔR^2	Adj R^2
Step 1:			
Age	0.01		
Gender	-0.05		
Organizational Tenure	-0.78		
Ethnicity	0.08		
Number of promotions	-0.08		
Education	0.21***	0.08	0.08
Step 2:			
IAFO	0.51***		
Self-efficacy	0.43***	0.15	0.23
Step 3:			
IAFO x Self-efficacy	-0.34*	0.02	0.25

*N = 299. Significance levels are as follow: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. All results include age, gender and organizational tenure as control variables. We estimated the regression equation as follows: Career Engagement = β_1 (Age) + β_2 (Gender) + β_3 (Org. tenure) + β_4 (Ethnicity) + β_5 (Number of promotions) + β_6 (Education) + β_7 (IAFO) + β_8 (self- efficacy) + β_9 (IAFO x self-efficacy) *Note- All beta weights are standardized*

Commensurate with Stone and Hollenbeck (1989) and Cohen et al. (2003), we plotted high and low levels (i.e., levels one standard deviation above and below the mean) of IAFO across a range of self-efficacy scores. Figure 2 illustrates the significant interactive relationship generated from our data (i.e., self-efficacy x IAFO).

Figure 2: Plotted Interaction Slopes



Commensurate with Stone and Hollenbeck (1989), we plotted both levels of the interactions (i.e., levels one standard deviation above and below the mean) in order to assess the significance of the slopes in the moderating conditions.

Theoretical Implications

This work helps broaden and develop the construct of informal accountability for others. Heretofore, no research that we know of has investigated whether feeling answerable for the behaviors of others enhances engagement in careers. Our findings indicated that, indeed, IAFO promoted career engagement. Extant research on IAFO (Royle, 2010) was limited with respect to its demonstrated influence on only half of the self-concept (i.e. organization-based self-esteem). The self-concept is the view individuals hold of themselves on social, physical and spiritual levels. It has two distinct parts; self-esteem and self-efficacy (Brockner, 1988, Hattie, 1992). As such, showing IAFO's relationship to self-efficacy, the other component of Brockner's (1988) and Hattie's (1992) construct of the self-concept, is both novel and informative.

This research also augments the literature on the global dimensions of self-efficacy. The data suggest that not only did self-efficacy enhance career engagement per Kim, Jang, Jung, Lee, Puig and Lee's (2012) suggestion but it also interacted with IAFO. The combination of these two variables on career engagement suggested that, individually, both of these variables enhanced career engagement, but together it seems that there is an added effect of having both. However, the amount of extra influence from having both self-efficacy and IAFO decreases as the amounts of either one increase. Essentially, those high in self-efficacy find answering for others less attractive than navigating the organization's political realities on their own. We must note that those high in IAFO and self-efficacy are still the most career engaged.

Managerial Implications

Our results are relevant to individuals across occupations. Specifically, the findings reaffirm the influence of self-efficacy as a driver of proactive work-related actions (e.g., Bandura, 1997, Weiner, 2012) and, as such, it further engages individuals in their careers. Our findings, augment choice theory (Glasser, 1998) which suggested that assessing employee abilities, finding avenues to tap them, and building upon them is more useful in enhancing employment potential than relying on external manipulations (e.g., coercion or pay). Thus, unsurprisingly, assessing what one finds most interesting and is best at, instead of simply directing him/her to perform a given set of tasks, promotes career engagement. This is particularly important in the Protean and boundaryless employment sense because individuals are very likely to follow their interests across functional distinctions or employers and throughout their careers (Arthur & Rousseau, 1996, Greenhaus et al., 2010). For those long-time employees of a single organization our findings help validate the assumption of Kim et al. (2012), which is that placing those high in self-efficacy in occupational counseling services and career camps enhances their engagement and development.

In terms of IAFO, the emphasis on proactivity is noteworthy. The demonstrated mechanisms of IAFO (e.g., Royle et al., 2008) in our data suggested that those high in it are more engaged in their careers than those who are not. Given our prior discussion of the changing nature of work stability, the "manager" of most interest in this sense is the individual. In other words, our data indicated that if individuals feel accountable for others they will likely engage them professionally, if not socially, in order to affect (ostensibly positively) others' work behaviors. If others see this intervention as helpful, they are likely to comply with suggestions/directives. Therefore, because this reflects well upon the informally accountable party, it bolsters his/her career engagement as well as promotes that of the target party. Specifically, if informally accountable individuals see others underperforming in the organization (e.g., struggling to complete tasks or engaging in counterproductive work behaviors), it is helpful to both parties if they speak up and suggest corrective actions.

Despite what reciprocating benefits IAFO can offer to answerable others, the interaction of IAFO and self-efficacy presents some difficult managerial issues. For example, managers want efficacious employees as well as those who feel answerable for others. Nevertheless, putting them together reduces the degree to

which IAFO seems attractive to those with high self-efficacy. A possible remedy for this may be for individuals to work in groups and teams where they are required to both interact with others closely and answer for the collective contribution of the group.

Limitations and Future Research

The pressure to publish from the doctoral student level forth creates a multitude of researchers and, thus, more competition for data sets (Steelman, Hammer, & Limayem, 2014). A common solution to this conundrum is to recruit student participants (Steelman et al., 2014). However, Gordon, Slade and Schmitt (1986) noted that as of the date of their publication nearly three quarters of publications in social psychology consisted of student samples. The “ecological” validity (i.e., the lack of generalizability due to utilized student samples being meaningfully different from the population at large) of these studies is, thus, always in question (Campbell & Stanley, 1963). We do have student respondents in our data set. Fortunately, the role of students in our data collection was such that they were rarely the actual survey respondents, which helps obviate the problem. Nevertheless, some of those effects might persist.

Our data do not indicate the degree to which respondents worked collectively or independently at their jobs. Bandura (1977, 1997, Weiner, 2012) distinguished between personal efficacy and collective efficacy. Personal efficacy, as noted above, referred to individuals’ beliefs about the probability of success based on their own actions. Collective efficacy referred to a group’s belief in the potency of its actions. Accordingly, research indicated that group success depends on high collective efficacy (Britner, 2012). As organizations continue to reduce levels of hierarchy and move towards more group/team efforts (Baruch, 2004, Greenhaus et al., 2010) future researchers might examine collective efficacy’s impact on career engagement. If in the future we work more in groups, then collective efficacy becomes more crucial to both team and individual success. Would feeling more informally accountable for others become more attractive in that case because individuals would work more communally? If so, would higher levels of IAFO interact with collective efficacy to enhance career engagement? Clearly, a study of employees working extensively (or exclusively) in teams, rather than in more individually oriented jobs, is necessary to answer those questions.

Research also suggested that self-efficacy might operate differently in traditionally collectivist cultures (e.g., Japan) as opposed to individualistic ones (e.g., the USA) (Heine, Lehman, Leung, Kitayama, Takata, & Matsumoto, 2001, Hofstede, 1980). Collectivist cultures are those that value group interests over those of individuals (Hofstede, 1980). Heine et al. (2001) noted that Japanese subjects who failed at a task persist much more than those who had succeeded at the same task. That is unsurprising because those who succeed can move on to other things. However, those who failed in the authors’ North American sample (i.e., Canadian and American respondents) spent less time trying to overcome the performance decrements relative to those who successfully completed the task and substantially less time trying to catch up than their Japanese counterparts. Heine et al. (2001) suggested that North Americans selectively attended to the positive aspects of themselves and worked hard to accentuate them. The Japanese selectively attended to the negative aspects of their performances and work hard to improve those. Given these different perceptions, future research should further explain how self-efficacy operates in different cultures. Specifically, the field would benefit from knowing if collectivists, who focus on correcting past mistakes are more or less career engaged than individualists who minimize the importance of failure and attempt to parlay successes into other opportunities.

CONCLUDING COMMENTS

Our study used a convenience sample of 299 full time employees comprised largely of respondents from the southeastern United States. There were 182 female respondents (61%); the average age was 37 and the average tenure in their current positions with their current employers was 7.4 years. Common respondent occupations included nurses, project managers, bankers and sales professionals. The sample included some

students but only those that met the minimal criteria for inclusion (i.e., currently working full time with at three years of employment).

Naturally, there are limitations to our findings. For example, measuring self-efficacy at an individual level as opposed to the collective level might mask important differences in terms of career engagement in the unfolding global economy. Further, IAFO and self-efficacy might interact differently among individuals in collectivistic societies, as opposed to in individualistic cultures like that of the United States. Future research should attempt to determine what those boundary conditions are.

The objective of our research was to examine the interaction of self-efficacy, informal accountability for others and career engagement. There are important theoretical and managerial implications to consider in this work. Our results suggested both self-efficacy and IAFO predicted higher levels of career engagement. In addition, the results suggested that although both self-efficacy and IAFO predicted higher levels of career engagement, the interaction of the two had a somewhat deleterious effect. In essence, those who had high levels of self-efficacy believed that feeling informally accountable for others was not as rewarding as going it alone when it comes to enhancing career engagement. With respect to career engagement, self-efficacy and informal accountability for others are both desirable attributes but are somewhat caustic when put together.

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