

# The Development and Use of the Theory of ERG: A Literature Review

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This literature review discusses twenty-three articles that have contributed to the development and understanding of the theory of existence, relatedness, and growth (ERG). The theory is traced from its outgrowth of Maslow's Hierarchy of Needs through efforts to further understand and expand its implications. ERG is mostly applied to the study of human motivation in the workplace as a tool for increasing morale and productivity. It has helped researchers to understand what constitutes job satisfaction and to identify incentives. The literature includes empirical studies, mostly quantitative, and discussions of ERG as a means for promoting a cause. The range of literature shows that the theory has broad relevance, including sociological, psychological, and organizational.

The theory of existence, resistance, and growth, commonly known as ERG, is the subject of this literature review. ERG is a motivational construct concerned with understanding the factors that contribute to individual human behavior. It is one of four content approaches that consider the intrinsic factors that cause a person to take specific actions (Ivancevich, Konopaske, & Matteson, 2008). Such understanding is useful to business students and practitioners seeking to understand and improve performance in the workplace. An outgrowth of Maslow's Hierarchy of Needs, ERG may be used to explain and/or predict workplace issues, relationship paradigms, and personal development choices. According to Ivancevich, Konopaske, and Matteson (2008), "ERG has not stimulated a great deal of research," so there is not a lot of empirical information available (p. 116). As a model of human need, however, ERG theory has been validated by human experience (Ivancevich, et al., 2008). The construct has been discussed in philosophical and empirical studies, and is often included with other content approaches to motivation. This literature review presents twenty-three articles from the following databases: ABI/Inform, Academic OneFile, Academic Source Complete, and JSTOR, as well as Library of Congress databases, especially Primo ArticleFinder. The selected articles fit into the categories of theory development, job performance, and advocacy.

### **Theory Development**

The ERG Theory was developed between 1961 and 1978, during which the theorist empirically tested data to hone the theory's major tenets and published scholarly material, according to Alderfer (1989). The article describes how the theory was developed, while contrasting the backgrounds of its author, Alderfer, with Maslow. Alderfer explains how the empirical study that validated ERG was conducted at an Easton, Pennsylvania, factory and further developed later with the construction of another empirical study at a larger facility, where measurements were improved and presented in a dissertation.

Wanous and Zany (1977) conducted a study that supported the integrity of ERG categories. Assessing the relationship between need satisfaction, importance, and fulfillment, they found that need fulfillment moderated satisfaction and importance. In other words, the importance of the need was based on the manner of its fulfillment. In addition, this phenomenon was more likely to exist within the categories of existence, relatedness, and growth, rather than between them.

From a military perspective, Wilcove (1978) found ERG lacking two critical categories: "respect for the organization and respect for one's supervisor" (p. 305). The added categories, along with a third (the need for personal freedom), were vetted through the administration of a questionnaire to "630 Navy male enlisted personnel in 11 types of organizations" (p. 305). A factor analysis identified the need components and was used to develop scales, regression analysis determined the use of the scales, and a cross-validation correlation analysis validated the stableness of the predictor. The study supported the respect for organization need. However, mutual respect, social receptivity, and organizational respect also emerged from the study as relatedness needs. Wilcove suggests that future research should examine growth and relatedness needs in terms of family, and organizational impact on personal rights.

Alderfer and Guzzo (1979) furthered the study of ERG by considering its usefulness in measuring enduring desires. The construct had been found to be effective in measuring episodic desires. The authors presented an instrument for testing enduring desires. It discussed the psychological and sociological factors of ERG, focusing on the educational backgrounds of parents, gender, and race. Respondents completed a questionnaire that related each of the three needs to two factors of need fulfillment: approach and avoidance. The approach revealed what steps a respondent might take to fulfill a need and avoidance discussed what steps a respondent might take to avoid disappointment. Managers were also asked to consider social desirability on a five-point scale from the perspectives of their supervisors. Once the instrument was validated, it was administered to students at three different levels: undergraduates, professional management, and internal managers. The results validated the instrument as a measurement of how long a desire might endure.

ERG has also been studied from the perspective of cultural application. Song, Wang, and Wei (2007) conducted an empirical study to determine if motivational preferences were influenced by culture, and if they could be characterized by ERG. The researchers surveyed 150 nonmanagerial employees in Jiangsu Province, east China. They found support for their hypotheses, also learning that motivational preferences differed between genders and personality types. They did not find, however, a correlation between gender and personality types. They recommend studying why and how motivational preferences correlate with needs and the relationship between esteem and performance. They also recommended that the study be conducted in other areas.

ERG was also used with the Hierarchy of Needs and hygiene factors in a dissertation examining job satisfaction of information technology (IT) leaders. This qualitative study condensed the categories of motivators to two: relatedness and tasks (Fismer, 2005). The researcher interviewed 20 Generation X (people born between 1961 and 1981) IT leaders to understand how job satisfaction was perceived in their industry. The aforementioned content-approach motivational theories provide the framework for the study. Fismer (2005) found that job satisfaction was related to extrinsic rewards.

ERG has even been used to improve technology. Chang and Yuan (2008) built a synthetic model combining ERG with the Markov Chain model, which predicts outcomes based on a series of interrelated points, to determine how customers would interact with a web-based project. The model was mapped to user behavior to simulate expected interaction. The simulation included 40 behavioral points coded to motivation levels of ERG and Maslow. The researchers concluded that the model accurately predicted customer needs in real-time. The study found ERG superior to Maslow in measurements of precision, recall, and F1 measure.

# Job Performance

ERG Theory, along with the three other content approaches to observing motivation, provided the theoretical underpinnings for an empirical study of motivational factors in the workplace. Wiley (1997) explains that the survey was first conducted in 1946, and again in 1980, 1986, and 1992, respectively. Factors from the 1946 tool were used as variables in the 1992 survey, which was issued to 550 employees "in industries such as retailing, services, manufacturing, insurance, utilities, health care, and government agencies" (para. 22). Results indicated that the top five motivating factors for employees of the 1990s were "good wages, full appreciation for the work done, job security, growth in the organization, and interesting work" (para. 49). Future studies should consider what motivates people to high performance.

Wiley's survey of employee motivation was used by Islam and Ismail (2008) to study motivating factors in the Malaysian workforce. This study involved 550 employees from 96 organizations and found that the six most effective motivating factors are high

wages, good working conditions, promotion, job security, interesting work, and full appreciation of work done. The authors recommend that programs focused on developing managers also include factors affecting employee work life.

These results rang true for Kaliprasad (2006), who observed practices in China and South Africa. Kaliprasad discussed a meta-analysis of workplace motivation based on the content-approach motivation theories, including ERG. The technical article presented nine employment needs, which included "pay, job security, nice coworkers, recognition, and credit for work well done, a meaningful job, opportunities for promotions/advancement, comfortable, safe and attractive working conditions, competent and fair leadership, and reasonable order and directions" (p. 24). It recommended that employers listen to their staffs, value and respect the staff, value a free and clear mind, and provide information, support, and resources, among others.

Arnolds and Boshoff (2002) investigated the influence of need satisfaction on esteem and job performance intention based on ERG through surveying top-level executives and frontline employees in a variety of industries in South Africa. They received 517 responses from the 2,500 surveys that were mailed. The results confirmed that "esteem as a personality variable exerts a significant influence on the job performance of both top managers and frontline employees" (p. 697). The study noted that top managers are motivated by growth needs and their performance intentions are influenced by their perception of opportunities for growth and advancement. Arnolds and Boshoff also found that frontline employees find satisfaction in peer relationships and compensation, but pay and benefits did not influence esteem. Frontline employees' need for growth did influence performance . They recommended a study investigate the relationship between self-esteem and job performance.

Esteem was also a factor emerging from a study of the career choice of teachers in Rawalpindi, Pakistan (Ud Din, Khan, & Murtasa, 2011). Another study using the content approach theories of motivation, including ERG, found that 90 teachers from 30 schools in the district chose their profession because of job satisfaction, rewards, recognition, and other growth needs. Researchers distributed and collected questionnaires by visiting secondary schools and colleges. They reported 100% participation in this empirical study.

In China, Chen (2008) conducted a study to determine the correlation between the income of personnel in scientific and technical fields and the ERG motivation categories. The researcher gathered information from 2,600 participants to consider how organizational performance would fare if existence, relationship, and growth needs were met. The results and recommendations for compensation policy were published.

## Advocacy

The articles reviewed in this section included several that used ERG and other content approaches as a basis for advocating change in a variety of circumstances and environments. In a philosophical argument, Argarwal (2010) used ERG, along with Maslow and Hertzberg, to advocate for cash compensation for executives in India rather than benefits. The argument held that ERG empirical data supports compensating executives with cash instead of perquisites. Argarwal suggests that, as people fulfill their growth need, they regress to the lower existence need, which can only be satisfied with money. Liu and Zhang (2008) advocated that the agricultural community's existence, relatedness, and growth needs could be enhanced by recruiting educated, upwardly-mobile talent. The authors note that the loss of talent was negatively affecting the agricultural community.

Mulder (2007) took another tack in using ERG for advocacy. The author applied the theory of ERG to explain his observance of students in a vocational school in the Netherlands. Mulder found that students seemed to be trapped in a frustration-regression phase called Demotivation Cycle. He suggested that student relatedness needs were tied to their existence needs. Their need to belong placed an emphasis on possessions and keeping up with trends. This focus distracts the youth and young adults from preparing for the future, resting in the shadow of their immediate concern: materialistic prosperity. He conceded that frustration-regression may also be triggered by academic failure and acknowledged that youth will vacillate between frustration-regression and satisfaction-motivation.

Linder (2007) spun the content approach theories to explain why some companies avoid post-completion audits. According to the article, implementing post-completion audits may negatively impact staff morale, impacting their senses of affiliation, self-esteem, and competence. Linder advised organizations considering a post-completion audit to allow employee participation, avoid tying extrinsic rewards to the audit, and to manage intensity during the procedure in order to maintain morale and motivation.

#### Conclusion

This literature review reveals that ERG has been used as a construct to understand what internal perspectives move humans to certain behaviors. As such, the constructs of existence, relatedness, and growth have been developed through qualitative and quantitative empirical studies to understand how employees might improve job performance. The study has been used to look at job satisfaction, self-esteem, co-worker relationships, management influence, and leader styles. Wilcove (1978) suggested adding categories to accommodate the concerns of the military. The theory has even been used to support the cases of those who wish to bring about change in their fields,

economic conditions, and even countries. Consistently, these studies show that extrinsic values are a prime influencer of human needs.

The research covered sociological, psychological, and organizational issues and noted many areas where the construct of ERG may be used as a study. These included studying the relationship between needs and family, esteem and performance, and the need for human rights. It was suggested that future work examine the process of motivational preference: what causes it and why.

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