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Research (SBS-JABR)

Email: editor@sbs.edu

JABR Website: <http://jabr.sbs.edu>

SBS Swiss Business School

Flughafenstrasse 3,

8302 Kloten-Zurich

Switzerland

www.sbs.edu

+41 44 880 00 88

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Implementation of Accrual Accounting in the Ghanaian Public Sector: The Moderating Role of Financial Resources Availability

Alexander Otopah

Chief Accountant, Eastern Regional Co-ordinating Council P.O. Box 303, Koforidua - Ghana.

Abstract

Considering the rate of failures in developing economies where accrual accounting has been implemented, the study investigated the factors that could affect the implementation of accrual accounting in Ghana. Drawing on Institutional Theory and Luder's contingency model for governmental accounting innovation, six hypotheses were postulated. The survey methodology was used with 499 finance officers from public sector institutions being sampled. Data were analyzed using the Explanatory Factor Analysis, Confirmatory Factor Analysis, and Structural Equation Model. The results show that instrumental-conceptual use and management support were found to have a significant positive relationship with the implementation of accrual accounting. Input-based competencies were found to have no relationship with the implementation of accrual accounting. The study also found that financial resource availability positively and significantly moderates the relationship between instrumental-conceptual uses, input-based competencies, management support, and implementation of accrual accounting. The findings of the study may imply that the implementation of accrual accounting in Ghana could be achieved if users of accounting information use it for decision-making, and management demonstrates readiness towards the change to accruals by providing significant budgetary allocation to support activities related to the transition to accruals.

Keywords: use of information, organizational capabilities, readiness towards change, financial resources availability, accrual accounting, instrumental use, conceptual use, input-based competencies, management support, and personal valence.

1. INTRODUCTION

According to Wynne (2008), a post-implementation review conducted on countries that have implemented public sector financial reforms such as accrual accounting in Malaysia, Pakistan, Sri Lanka, Fiji, and Nepal have recorded low success rates due to poor implementation strategies. Consequently, some scholars have argued that accrual accounting is inappropriate for the public sector. Similarly, Abeyasinghe and Samanthi (2016) assert that no developing economy reports success in the implementation of accrual accounting in the public sector. Some scholars have even described developing economies' moves to accrual as unsuccessful and problematic missions (see e.g. Adhikari and Mellemvick 2011; Tickcell 2010). On the surface, it may seem that accrual accounting, as developed for the private sector can be imported directly into the public sector without difficulty. However, the extent to which this could be done may have produced tensions and unconvincing results in its introduction to the public sector. This is because the movement to accrual accounting while increasingly pervasive has taken place with continuous debates and disagreements (Lapsely et al.al. 2009) as no developing economy reports success in the change to accrual accounting.

Notwithstanding the above scary evidence, the Government of Ghana has decided to fully transition from cash to accrual accounting by the year 2025 in the public sector. However, Ghana's decision to implement accruals may encounter challenges if the factors that could impede the implementation process are not investigated before the

transition. This may stem from the fact that although post-implementation literature suggests that the use of information, organizational capabilities, readiness towards change, and financial resources availability are some of the factors affecting the implementation of accruals accounting (see e.g. Mateke et al. 2020; Mbelwa et al. 2019, Tickcell 2010,) its effects differ from economy to economy. Further, the dimension of these factors has not been examined to see its effect on the implementation of accrual accounting especially in developing economies. Additionally, while the literature on the implementation of accrual accounting has a preponderance of assertions in terms of financial implications, (Gigli and Mariani 2018; Mbelwa et al. 2019) pre-implementation empirical evidence to support these assertions is underweight. Therefore, the empirical findings of the study will extend our understanding of the implementation of accrual accounting from a developing economy perspective considering the moderating role of financial resources availability.

2. NEW INSTITUTIONAL THEORY AND LUDER'S CONTINGENCY MODEL FOR GOVERNMENTAL ACCOUNTING INNOVATION

According to Lapsely et al. (2009), accounting practices do not escape the pressures of the standardized world and the mechanisms are in the world of accounting regulations, pressure groups, knowledge experts, and arenas of standardization. The core concept of institutional theory isomorphism reflects the pressures mounted by institutional elites to get certain practices institutionalized in the public sector regardless of technical efficiency. Mimetic isomorphism refers to the power that drives organizations to model themselves on other organizations considered more successful such as the private sector and developed economies. The concept of mimetic isomorphism may be perceived in the case of developing countries such as Ghana in following the implementation of accrual accounting of developed economies such as Australia and New Zealand where the implementation has arguably been successful in the public sector.

From the perspective of mimetic isomorphism, Anessi-Pessina et al. (2008) suggest that policymakers and top management mimic the accounting systems of the private sector for legitimacy and technical reasons. For this reason, the top management of public sector organizations is influenced by international donor partners to support the institutionalization of accrual accounting in the public sector to increase legitimacy (see Mbelwa et al. 2019; Hyndman and Connolly 2011). Coercive isomorphism according to DiMaggio and Powell (1983) emanates from both formal and informal pressures exerted on institutions by other organizations upon which they are dependent for resources. Such pressures according to Adhikari and Mellemvick (2011) are felt as forces, persuasions, or an invitation. Within the context of the public sector, users of accounting information such as international lending organizations, and credit rating agencies amongst others exert pressures for the use of accrual accounting in developing countries for legitimacy, accountability, conditions for loans and grants, credit ratings, and policy credibility. Consequently, donors and governments use the provision of financial resources to influence the institutionalization of accrual accounting in the public sector.

Luder's contingency model for governmental accounting innovation explains how contextual, political, administrative, and social factors influence and shape the implementation of accounting innovations in the public sector. From the social structural perspective Upping and Oliver, (2007) posits that the orientation of users to use accrual information is a factor that influences the implementation of accounting systems. This is because the need for accounting information increases the producer's readiness to produce that information. Similarly, the interest of the government and donors in using accrual information heightens the implementation of accrual accounting. From the structural variables of the politico-administrative perspective, Luder (1992) affirms that specialist training (organizational capabilities) concerning knowledge, skills, and competencies of accountants are factors that enhance the abilities of producers of accounting information to implement accruals. Lastly, from the implementation barrier perspective, Ouda (2010) suggests that financial and budgetary support from the government and international community act as barriers or facilitators for economies that intend to transit to accruals must overcome to enhance the implementation. Based on these theoretical considerations, the model for the study has been conceptualized as shown in Figure 1.

2.1. Hypothesis Development

Use of Information and Implementation of Accrual Accounting

In the study, two dimensions of the use of information are considered, namely, instrumental and conceptual use. According to Diamantopoulos and Souchon, (1999), instrumental use refers to the direct application of information to make a particular decision. However, conceptual use refers to the indirect application of information to broaden the managerial knowledge base. Accrual accounting is defined as a system of accounting that recognizes revenue or expenditure whether cash has been received, paid, or not (Mbelwa et al. 2019). Instrumental-conceptual use of information may lead to effective evaluation of decisions in seeking to establish expenditure controls and policy formulation and eventually influences organizations' performance. The study argues that the influence of instrumental-conceptual use of financial information on organizational performance may be attributed to the fact that both instrumental and conceptual use operates when rational budget decisions are taken. According to Hyndman and Connolly (2011), the non-usage of accrual financial statements for instrumental or conceptual analysis accounts for the poor transition from cash to accruals in the public sector. The study further argues that if users of accounting information such as creditors, civil society organizations, and donor partners demand accrual information, it will force the government to change from the cash basis of financial reporting to the accrual basis. This is because Luder's model for governmental accounting

innovation asserts that the orientation for users to use accounting information creates an environment of an economic market of information (demand and supply) which compels the producers of accounting information to supply such information. Based on such considerations, the study hypothesizes that:

H1: There is a positive relationship between the instrumental-conceptual use of information and the implementation of accrual accounting.

Organizational capabilities and implementation of accrual accounting

In the study, one dimension of organizational capabilities was considered, namely, input-based competencies. Input-based competencies encompass the knowledge, and skills that enable a firm's transformational process to create and deliver products and services (Lado and Wilson, 1994). Whereas Connolly and Hyndman (2006) found that staff shortages are obstacles to the implementation of accrual accounting, Tickcell (2010) found that the lack of skilled and experienced accounting staff in government organizations represents a major challenge affecting the adoption of accrual accounting.

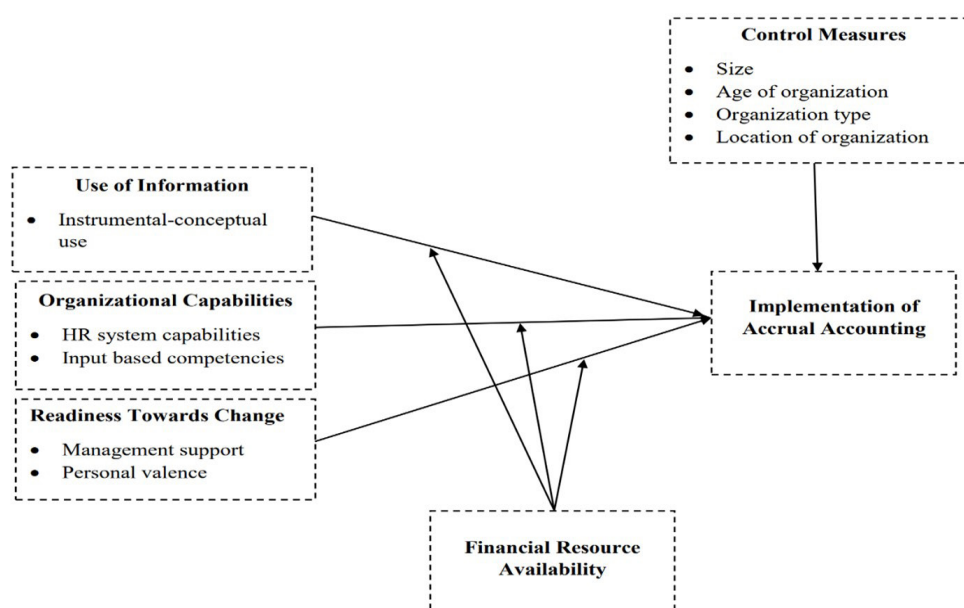


Figure 1: Factors affecting implementation of accrual accounting

Competencies in the opinion of Trivallas et al (2015) are vital to performing a specific task in organizations within a defined technical or functional work area. The study argues that competencies are tools that will improve employees understanding of how to apply accounting techniques and standards in preparing financial statements. This stems from the fact that Maheshwani and Vohra (2015); Chang, and Huang (2010) affirm that competencies have a substantial importance on a firm's human capital that leads to a more strategic role in contributing to organizational change and reforms. The institutional theory according to Mbelwa, (2015) suggests that the diffusion of professional competencies to organizations through training, and education influences the implementation of reforms. Further, the skill sets of accountants in the technical area of accounting could prove decisive in the march to accruals. This is because accountants could be classified as one of the knowledge employees. For instance, the professional qualification of accountants could be argued to be a key ingredient of the organizational capability to reform due to their abilities to apply accounting standards. According to Luder's contingency model, the lack of certain general skills in accounting creates implementation barriers that cannot be eliminated in the short term, and an attempt to introduce accrual accounting will fail due to the lack of knowledgeable accountants. The study, therefore, hypothesizes that:

H2: There is a positive relationship between input-based competencies and the implementation of accrual accounting.

Readiness towards Change and Implementation of Accruals Accounting

The study considers one dimension of readiness namely, management support. Management support according to Holt et al. (2007) refers to the extent to which one feels that the organization's leadership and management are committed to and support or do not support the implementation of prospective change. Choi and Chang (2009) argue that employees appear to develop positive beliefs toward implementation when institutional leadership encourage innovation and provide a convincing vision for its implementation. Whereas these authors claim that senior managers are the primary source of organizational change due to their capacity to manipulate the organizational environment, Chatterjee et al. (2002) see senior management as significant enablers of organizational innovation. Empirically, Ismail (2018) provides evidence to show that change valence has a significant positive influence on the change efficacy of accrual accounting. Given this, the study argues that when senior management becomes the promoters and supporters of the implementation of accrual accounting, they will provide a clear, long-term vision for its implementation. The study further, argues that implementation of accrual accounting is likely to happen with management support. This is because, senior management would send a clear message to employees about the importance of accrual accounting and thereby, create a strong climate for implementation to take place. Haffar et al. (2019) argue that organizational members who believe that they will personally gain or accrue some benefits such as promotions, increases in salary, or bonuses because they participate in change are generally more willing to accept change.

Consequently, in the absence of strong convincing, and demonstrable support for implementation, employees are likely to conclude that the innovation being implemented is a passing managerial fancy ignore it and it will go away (Klein and Knight, 2005). The study, therefore, hypothesizes that:

H3: There is a positive relationship between management support and the implementation of accrual accounting.

Moderating Hypothesis

Financial resources refer to money and related aspects of funding and finance (Potokri, 2014) including government allocations and grants from development partners to finance public sector reforms. Extant literature has argued that the use of accounting information is influenced by institutional and contingency factors (see for e.g. Alijarde and Julve 2014 Paulson 2006). For instance, Suddaby (2010) contends that the factors that influence the use of accounting information are subject to change due to the influence of financial resources and donors. Luder's contingency model, suggests that the socio-economic levels, including the income of a user, influence the individual behavior toward the use of accounting information. The study, therefore, hypothesizes that:

H4: Financial resource availability moderates the positive relationship between instrumental-conceptual use and implementation of accrual accounting.

Investments in human resources may affect the talent that enhances the process and resources that affect the organization's strategic success. The study argues that getting the best out of human resources depends on what resources are used to deliver human resource practices. Human resource management, according to Ragupathi (2013), involves the acquisition of people. This presupposes that funds are required to be able to acquire the best human resources before the transition to accruals. In view of this, Damanpour and Schneider (2006) affirm that organizations with greater economic health invest more in innovation. As a result, researchers such as Mbelwa et al. (2019) have recognized the role played by human resources in achieving strategic objective changes. As a result, they describe human resources as an asset that requires continuous investment. This suggests that attracting, recruiting, training, and retaining skillful and potential accountants may require substantial investment in wages and salaries as well as training and development. Further Ochetan and Ochetan (2012) found that financial crisis has a strong impact on the organization's human resources. The study, therefore, hypothesizes that:

H5: Financial resources availability moderates the positive relationship between input-based competencies and implementation of accrual accounting.

Weiner (2009) posits that organizations' readiness towards change is a function of how organization members value the change and how favorably they appraise key determinants such as task demand, resource availability, and situational factors. The resources include human, physical, and financial. Studies such as Choi and Chang (2009) identify funding as a key driver for an organization's readiness for change. This may suggest that an organization's readiness to change is dependent on the agency's resources. For example, Damanpour and Scheider (2006) provide evidence to suggest that the economic health of an organization positively influences managerial decisions toward the adoption of an innovation. Aside from offering attractive remuneration to entice competent accountants, existing staff competencies, skills, and knowledge will have to be developed through training. The study argues that without financial resources, staff skills in accounting cannot be developed because Ochetan and Ochetan (2012) contend that situational constraints such as financial crises act as barriers to employees' competencies development. Organizational members, according to Weiner (2009) may value or support the change because of the benefits they stand to get financially. Further, financial resource availability influences decision-makers (top management) to take the risk and invest in a new program because Hooi (2007) argues that readiness and feasibility of implementation are dependent on financial resources. Based on these considerations the study hypothesizes that:

H6: Financial resources availability moderates the positive relationship between management support and implementation of accrual accounting.

3. METHODOLOGY

The study adopted a quantitative research design by surveying to collect data. The study had 44 items in the survey instrument to be used for data analysis. Consequently, the study required a minimum sample size of 44 times 10 = 440 using the ratio of 10:1 because the population was unknown as recommended by Hair et al. (2010). The purposive sampling technique was used to enable the researcher to access public sector organizations with a functional accounts unit whose heads were selected as the key informants for the study. The accountants were purposively selected as key informants, because government accounting and reporting in Ghana is a legal responsibility of public sector accountants. Consequently, 700 questionnaires were administered but 519 were returned given a response rate of 72%. After data cleaning and checking for common method bias, 499 questionnaires were deemed fit for Exploratory Factor Analysis, Confirmatory Factor Analysis, and Structural Equation Model analysis. The measures used for the study were respectively adapted out of the item pool in the literature; (see e.g. Mbelwa 2015; Diamantopoulos and Souchon 1999; Saa-Perez and Garcia-Falcon 2002; Spreitzer 1995; Heijde and Heijden 2006; Holt et al. 2007; Miller and Friesen 1982; Klein et al. 2001; Choi and Chang 2009 and Lapsely 1986). The items were anchored on 5 points Likert scale from strongly disagree to strongly agree.

3.1. Exploratory Factor Analysis

A Maximum Likelihood Analysis (MLA) was conducted on the 44 items with oblique rotation (promax) because there is evidence in the literature that the variables in the study correlate with each other. The Kaiser–Meyer–Olkin (KMO) measure verified the sampling adequacy for the analysis, Kaiser–Meyer–Olkin = .838 ('superb' according to Field, 2009), and all Kaiser–Meyer–Olkin values for individual items were > .50, which is well above the acceptable limit of 0.5 (Field, 2009). Bartlett's test of sphericity $\chi^2 (351) = 5439.486$, $p < .001$, indicated that correlations between items were sufficiently large for Maximum Likelihood Analysis. An initial analysis was run to obtain eigenvalues for each component in the data. Factors with cross-loadings were deleted to ensure the unidimensionality of the factors. The resultant analysis showed eight factors explaining 67.994 percent of the variance. Table 2 shows the factor loadings for the variables of the study from the pattern matrix. The items that cluster on the same components suggest that factor 1 is Management Support (RLS); factor 2 is Financial Resource Availability (FRA), and factor 3 as Instrumental-Conceptual Use (UIC). Further, factor 4 clustered on Implementation of Accrual Accounting (IAA I), factor 5 as Input Based Competencies (CIB), factor 6 as Organizational Capabilities (CHR), factor 7 as Implementation of Accrual Accounting (IAA II), and factor 8 as Readiness towards change (RPV). The factor analysis result is shown in Table 1.

Table 1 Exploratory Factor Analysis of Items

| Variable list | Component | | | | | | | |
|--------------------------------|-----------|--------|--------|--------|--------|--------|--------|--------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| RLS1 | .731 | | | | | | | |
| RLS2 | .817 | | | | | | | |
| RLS3 | .818 | | | | | | | |
| RLS4 | .755 | | | | | | | |
| UIC1 | | | .817 | | | | | |
| UIC2 | | | .783 | | | | | |
| UIC3 | | | .765 | | | | | |
| FRA2 | | .621 | | | | | | |
| FRA3 | | .797 | | | | | | |
| FRA4 | | .816 | | | | | | |
| FRA5 | | .648 | | | | | | |
| CIB1 | | | | | .715 | | | |
| CIB2 | | | | | .795 | | | |
| CIB3 | | | | | .795 | | | |
| CIB4 | | | | | | | | |
| IAA1 | | | | .726 | | | | |
| IAA2 | | | | .845 | | | | |
| IAA3 | | | | .858 | | | | |
| IAA6 | | | | | | | .773 | |
| IAA7 | | | | | | | .863 | |
| IAA8 | | | | | | | .828 | |
| CHR2 | | | | | | .717 | | |
| CHR3 | | | | | | .786 | | |
| CHR4 | | | | | | .684 | | |
| RPV3 | | | | | | | | .593 |
| RPV5 | | | | | | | | .846 |
| RPV6 | | | | | | | | .878 |
| Eigen values | 6.337 | 3.312 | 1.952 | 1.910 | 1.417 | 1.277 | 1.098 | 1.054 |
| % of variance explained | 10.343 | 8.745 | 8.393 | 8.303 | 8.238 | 8.206 | 8.115 | 7.650 |
| Cum. variance explained | 10.343 | 19.088 | 27.481 | 35.784 | 44.022 | 52.229 | 60.344 | 67.994 |

Source: Author's Construct, 2023

3.2 Confirmatory Factor Analysis

A confirmatory factor analysis using AMOS 21 was performed to test the measurement fit model. The confirmatory factor analysis as prescribed by Hair et al. (2010) was used to test how well the measured variables represent the number of constructs and the normality of the data. Six model fit indices were used to assess the overall goodness of fit of the model: the ratio of χ^2 to the Degrees-of-Freedom (d.f.), Root Mean Square Error of Approximation (RMSEA), Normed Fit Index (NFI), Comparative Fit Index (CFI), Goodness-of-Fit Index (GFI), Adjusted Goodness of Fit Test (AGFI). All the model indices except the CFI and NFI were within the accepted levels, confirming the measurement model as a good fit with the data collected. Thus, we tested the reliability and validity of the constructs in terms of reliability, convergent, and discriminant validity. Therefore, the model fit indices obtained were $\chi^2 = 494.767$; d.f. = 265; $\chi^2/\text{d.f.} = 1.867$; RMSEA = .042; GFI = .931; CFI = .954 and NFI = .906; IFI = .954; TLI = .943 thereby confirming the unidimensionality of each construct in the model (Anderson and Gerbing, 1988). To evaluate the measures of the constructs in the measurement model a reliability test analysis was performed. This was estimated by the Cronbach Alpha value and composite reliability. The composite reliability was estimated using the square of the summation of the factor loadings/ {(square of the summation of the factor loadings) + (summation of error variables)}. The interpretation of the

resultant coefficient is similar to that of Cronbach's alpha, except that it takes into account the actual factor loadings rather than assuming that each item is equally weighted in the composite load determination. The result in Table 2 showed the composite reliability of the main constructs in the study was above 0.80 and the Cronbach Alpha value was all above 0.70 which met the recommendation by Nunnally (1978).

3.3 Validation and Reliability Analysis

To determine that the constructs used for this study were valid, the convergent validity and discriminant validity procedure were used. The loadings for the measures of each construct from the exploratory factor analysis results were all relatively large and positive above .50. The squared of these loadings, indicates the commonality of the measure, or the variance that the measure has in common with the construct. When the communality measures are standardized, the average communality of a block of indicators is referred to as Average Variance Extracted (AVE) (Fornell and Larcker, 1981). The criterion for establishing validity is that the AVE measures should exceed .50 to ensure that, on average, the measures share at least half of their variation with the latent variable (Fornell and Larcker, 1981). As shown in Table 2, the AVE criteria were met for all the latent variables. Thus, for the constructs with AVE .50 and above, the validity of their measures was supported. Again, the correlation between latent constructs in the study was used as the focus for discriminant validity. The discriminant validity of the constructs was assessed as Fornell & Larcker (1981) suggest by comparing the squared root of the AVE with the correlations among constructs. Examinations of Table 3 showed that the squared root of the AVE was significantly greater than the correlation among latent variables that supports the discriminant validity of the construct.

Table 3 Confirmatory Factor Analysis of Measures

| | |
|---|------------|
| Model Fit Indexes: $\chi^2 = 494.767$; d.f. = 265; $\chi^2/\text{d.f.} = 1.867$; RMSEA = .042; GFI = .931; CFI = .954 and NFI = .906; IFI = .954; TLI = .943 | |
| <i>Implementation of accrual accounting I (CA = 0.827 CR= 0.839)</i> | SFL |
| 1. Stock on hand at the end of the accounting period is reported. | .676 |
| 2. Accounts payables at the end of the accounting period are reported. | .883 |
| 3. Accounts receivables at the end of the accounting period are reported. | .821 |
| 4. The values of assets are recorded in the accounts at their market values. | .704 |
| 5. A non-current asset is depreciated to identify underutilized assets | .863 |
| 6. Accrual from capital projects is recorded in the books. | .706 |
| <i>Financial resource availability (CA = 0.746 CR= 0.754)</i> | |
| 1. Money is readily available to support activities related to an accounting change. | .681 |
| 2. There is always a provision in the national budget for public sector reforms | .634 |
| 3. Allocating sufficient budgets for reform-related activities is envisaged | .684 |
| 4. Development partners <u>would provide</u> additional financial resources for public sector reforms | .634 |
| <i>Management support (CA = 0.799 CR = 0.836)</i> | |
| 1. Management has set a clear signal that the accounting practice is going to change | .650 |
| 2. I believe management has done a great job in bringing about this accounting change. | .827 |
| 3. Our senior management have put all their support behind this change effort. | .798 |
| 4. Every head of the department has stressed the importance <u>of this</u> accounting change | .711 |

| | |
|---|------|
| <i>Instrumental-conceptual use (CA= 0.811 CR = 0.811)</i> | |
| 1. Accounting information is translated into significant practical executed budget actions of the dept. | .741 |
| 2. Accounting information is often used to keep the department revenue and cost knowledge base in the budget execution | .794 |
| 3. Accounting information is often used to keep the department revenue and cost knowledge base in the budget approval process | .767 |
| <i>Input-based competencies (CA= 0.780 CR = 0.799)</i> | |
| 1. I have mastered the skills necessary for my job | .669 |
| 2. I consider myself competent to engage in in-depth accounting discussions in my job | .740 |
| 3. I consider myself competent to provide accounting information | .746 |
| 4. I have confidence in my capability within the area of accounting expertise | .637 |
| | |

Source: Author's Construct, 2023

SFL= Standard Factor Loadings CA= Cronbach Alpha CR = Composite Reliability

| Constructs | No. of items | AVE | \sqrt{AVE} |
|--------------------------------------|--------------|-------|--------------|
| Instrumental use | 3 | 0.589 | 0.768 |
| Input based competencies | 4 | 0.500 | 0.700 |
| Management support | 4 | 0.562 | 0.750 |
| Financial resource availability | 4 | 0.500 | 0.700 |
| Implementation of accrual accounting | 3 | 0.637 | 0.798 |

Source: Author's Construct, 2023 Note: AVE=Average Variance Extracted

4. RESULTS

The hypothesized relationships were tested using AMOS. The items for each scale were averaged to create single indicators for each latent variable, which turned the hypothesized structural model into a path model. This approach has been used to correct for random measurement error (Netemeyer et al. 1990) and to reduce model complexity (Li and Calantone, 1998). The variance inflation factors associated with each of the regression coefficients ranged from 1.105 to 1.833, suggesting no serious problems with multicollinearity. After confirming the validity and reliability of the measurement model, the researcher proceeded to analyze the structural model. The properties of the casual paths, including path coefficients and t-values, are shown in Table 4. The path coefficients related to each hypothesized relationship in the model, as well as the moderation effects are also summarized in Table 4.

5. DISCUSSIONS OF RESULTS

Hypothesis 1 was supported. The findings confirm some parts of the literature such as Pollanen and Lo-iselle-Lapointe (2012); Hyndman and Connolly (2011); that the implementation of accrual accounting in the public is affected by the extent of utilization of the financial statement for decision-making. The results may imply that governments' desire to use accounting information for decisions may ultimately result in the implementation of accrual accounting. This is because according to Cohen et al. (2013) elected government uses accrual accounting figures as an animation machine. This is to primarily gain an advantage during negotiation for a loan and in that sense; accrual accounting is implemented to legitimize public sector organizations to their external constituents. Because accounting information plays a technical, rational role when used to measure the efficiency of decision-making government may implement accrual accounting to achieve technical efficiency. The results are validated through Luder's model which raises the fact that the orientation for users to use accounting information creates information markets (demand and supply) which producers attempt to meet by implementing a more informative accounting system.

Hypothesis 2 was not supported as the study found no relationship between inputs-based competencies and the implementation of accrual accounting. The results offer many insights concerning Ghana's quest to implement accruals in the public sector. First, it has been established in the literature that, epistemic communities such as the International Monetary Fund, World Bank, and other donor agencies (see for e.g Adhikari and Garseth-Nesbakk, 2016; Ahn et al. 2014) champion the diffusion of public sector financial reform such as accrual accounting. These donors hire lead external consultants; professional institutions and academia often referred to as "champions of accrual accounting" to lead the implementation of accrual accounting in the public sector. These consultants often reject the services of government accountants during implementation. It has been argued in the literature that the whole accrual accounting thing is a private sector accounting being imported into the public sector, hence requiring private sector consultants to implement and not the internal government accountants (Adhikari and Mellemvik, 2011). In view of this, the skills, competencies, and expertise of the internal accounting staff of the public sector may not be required during the implementation of accrual accounting. Hyndman and Connolly (2011) have also raised doubts even about the capacity of public sector accountants to provide meaningful financial reports. The implementation of accrual accounting discourse is literally under the control of consultants-promoters whereas the competencies of government accountants have little or no role to play as it happened in Sri Lanka, Nepal, and Fiji (Adhikari and Mellemvik 2011; Harun and Robinson, 2010).

Further, the existence of accounting software could be cited as one of the reasons that, the competencies of accountant may not count during financial reforms. It may be argued that these days, the technical work of accounting such as the preparation of vouchers, cash books, ledgers, reconciliations, statements of financial position and performance, and cash flows amongst others can be handled by accounting software such as the Ghana Integrated Financial Management System (GIFMIS), quick books, sun, and others. Consequently, human resources without accounting competencies may be able to handle accounting operations with the aid of computers. Such arguments may also fuel the assumption that the specialized skills of accountants may be irrelevant in the implementation of accrual accounting. In view of this, some literature has even admonished accountants to concentrate on non-accounting tasks such as communication, organizational behavior, and human relationship to enhance their service potential. What may be required to prepare financial statements may not be competencies in accounting or the recruitment of qualified accountants but the ability to operate computer applications. This may be attributed to the fact that some researchers such as Kavanagh and Drennen (2008), have even recommended abandoning a wholly procedural technical approach to financial accounting due to the proliferation of accounting packages which has lowered the value of accountants in the implementation of accrual accounting.

Hypothesis 3 was supported. The study results confirmed the works of Mbelwa et al. (2019), Choi, and Chang (2009) who found that there is a significant positive relationship between management support and implementation of accounting systems. The results could mean that in the absence of strong, convincing, informed, and demonstrable management support, an implementation may not take place. This is because, in the absence of top management support, the employees are likely to conclude that the implementation according to Klein and Knight (2005) is just a public sector fancy that should be ignored. This could mean that, management behavior, statement, and comments may send positive signals about the importance of accrual accounting to employees to get their buy-in. However, Bruno and Lapsely (2018) identified the lack of management support in terms of issuing clear-cut policies as obstacles to policy implementation in the public sector. Within the context of the public sector in Ghana, discussions about organizational readiness towards change for management support may be unlikely to be taken out of the political arena. This stems from the fact that top management positions in the public sector are occupied by political apparatchiks. Consequently, financial reform decisions rest with these government appointees. In view of this management, support in terms of the demonstration of political will may be imperative. This is evidenced by the South Korean and Canadian experiences where the demonstration of management and political support led to the implementation of accrual accounting (see e.g. Ahn et al. 2014; Pollanen and Loiselle-Lapointe (2012). The results may be validated by Luder's contingency model which raises the fact that the changed behavior of politicians, leaders, managers, and accountants determines the introduction or non-introduction of a more informative public sector accounting system.

With the moderation effects, **hypothesis 4** was supported implying that the availability of financial resources may facilitate the training of users of accounting information in understanding the complex accrual accounting information and how to apply the information in decision-making. Again, financial resource availability will allow more user education to be carried out for users to be interested in using accrual information. One reason cited in the literature (Alijarde and Julve, 2014; Hyndman and Connolly, 2011) for non-utilization of accrual information during political and administrative discussions is the complexity of such information which often tends to negatively affect the implementation of accrual accounting. Further, users of accounting such as anti-corruption campaigners may be interested in accounting information in organizations with high financial resources to safeguard the public interest and this may necessitate the implementation of a more informative accounting system.

Hypothesis 5 was supported. This result may suggest that organizations with more financial resources will be able to develop the capacities of their employees. The skills and knowledge of employees can be developed by sponsoring staff to attend workshops on the accrual-based International Public Sector Accounting Standards (IPSAS), computer application operations, and interpretation to be able to cope with accrual transactions. Continuous Professional Development (CPD) programs organized by professional institutions are often not free. An organization with more financial resources available will be in a position to pay such fees and invest funds to enhance staff competencies that may be required during the implementation of accrual accounting.

Hypothesis 6 was supported. This may imply that the demonstration of support for accrual implementation by the government could be done by making adequate budgetary allocations toward implementation-related activities. It may take money to lay the legal and regulatory framework, development of accounting policies, and valuation of assets, recruitment of consultants, and purchases of accounting software and technological infrastructure. The availability of more financial resources will allow government support to manifest by acquiring logistics for the implementation. For instance, Hooi (2007) has confirmed that the feasibility of management to implement reforms is dependent on the availability of financial resources.

6. PRACTICAL IMPLICATION AND CONCLUSION

The results avert the minds of policymakers that the whole implementation of accrual accounting may be dependent on readiness toward change. It highlights the importance of political and administrative support from leadership as well as employee support.

Further, the extent to which accrual financial information is used for decision-making is also a key factor. For instance, the recent request to the IMF for a bailout may demand the use of accrual information to determine the total public debt and the total value of national assets. This may require that both the national budget and national accounts are prepared on an accrual basis hence making the transition to accruals urgent and non-negotiable. In addition, the results affirm that the mere presence of chartered accountants in the public sector will not necessarily lead to a transition to accruals if the government over-rely on external consultants. Similarly, the internal accounting staff should be assured that no one would lose his/her job during the march to accruals to get their support. Lastly, the study results illuminate the fact that there is a need to make significant budgetary allocations as the study results suggest that more financial resources facilitate the transition to accruals.

In conclusion, the study makes a novel contribution by providing comprehension of the moderating role of financial resources in the implementation of accrual accounting from a developing economy perspective.

REFERENCES

- Abeysinghe, C., and Samanthi, D. (2016). Accrual Basis and Political Interest in Public Sector Accounting. The Case of a Municipal Council in Sri Lanka. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(3), 58-68.
- Adhikari, P., and Garseth-Nesbakk, L. (2016). Implementing Public Sector Accruals in OECD Member States: Major Issues And Challenges. *Accounting Forum*, 1-18.
- Adhikari, P., and Mellemvik, F. (2011). The Rise and Fall of Accruals: A Case of Nepalese Central Government. *Journal of Accounting in Emerging Economies*, 1(2), 123-143.
- Ahn, D., Jacobs, K., Lim, D.-W., and Moon, K. (2014). Beyond Self-Evident: Recognising the Problematic Political Context of Accrual Accounting Adoption in South Korea. *Financial Accountability & Management*, 30(1), 25-48.
- Alijarde, I. B., and Julve, V. M. (2014). Accrual Financial Reporting in the Public Sector: Is it a Reality? *Revista Innovar Journal*, 24(54), 107-119.
- Anderson, J. C., and Gerbing, D. W. S. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 10(3), 411.
- Anessi-Pessina, E., Nasi, G., and Steccolini, I. (2008). Accounting Reforms: Determinants Of Local Governments' Choices. *Financial Accountability and Management*, 24(3), 321-342.
- Bruno, A., and Lapsley, I. (2018). The Emergency of an Accounting Practice: The fabrication of Government Accrual Accounting System. *Accounting, Auditing & Accountability Journal*, 31(4), 1045-1066.
- Chang, W. J., and Huang, T. C. (2010). The impact of human resource capabilities on internal customer satisfaction and organizational effectiveness. *Total Quality Management*, 21(6), 633-648.
- Chatterjee, D., Grewal, R., and Sambamurthy, V. (2002). Shaping up for E-commerce: Institutional enablers of the organizational assimilation of web technologies. *MIS Quarterly*, 26, 65– 89.
- Choi, J., and Chang, J. (2009). Innovation Implementation in the Public Sector: An Integration of Institutional and Collective Dynamics ICD. *Journal of Applied Psychology*, 94(1), 245-253.
- Cohen, S., Kaimenakis, N., and Venieris, G. (2013). Reaping the benefits of two worlds: An explanatory study of the cash and the accrual accounting information roles in local governments. *Journal of Applied Accounting Research*, 14(2), 165-179.

- Connolly, C., and Hyndman, N. (2006). The actual implementation of accrual accounting. *Accounting, Auditing and Accountability Journal*, 19(2), 272-290.
- Damanpour, F., and Schneider, M. (2006). Phases of the adoption of innovation in organizations: effects of the environment, organization, and top managers. *British Journal of Management*, 17(3), 215-236.
- Diamantopoulos, A., and Souche, L. (1999). Measuring Export Information Use: Scale Development and Validation. *Journal of Business Research*, 46, 1-14.
- DiMaggio, P., and Powell, W. (1983). The iron cage revisited. *Institutional Isomorphism and collective rationality in organizational fields American Sociological Review*, 48, 147-160.
- Field, A. (2009). *Discovering Statistics Using SPSS* (Third ed.). Sage Publications Inc
- Fornell, C., and Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.
- Gigli, S., and Mariani, L. (2018). Lost in the transition from cash to accrual accounting. *International Journal of Public Sector Management.*, 31(7), 811-826.
- Haffar, M., Al-Karaghoul, W., Irani, Z., Djebarni, R., and Gbadamosi, G. (2019). The influence of individual readiness for change dimensions on quality management implementation in Algerian manufacturing organizations. *International Journal of Production Economics*, 207, 247-260.
- Hair, J. F., William, C. B., Barry, J. B., and Rolphe, A. (2010). *Multivariate Data Analysis: A Global Perspective*. Upper Saddle River: Pearson.
- Harun, H., and Robinson, P. (2010). The Adoption of Accrual Accounting in the Indonesian Public Sector. *Research in Accounting in Emerging Economies*, 10, 233-250.
- Heijde, D., and Heijden, D. (2006). A Competence-Based and Multidimensional operationalization and measurement of Employment of Employability. *Human Resource Management*, 45(3), 449-476.
- Holt, D., Armenakis, A., Feild, H., and Harris. (2007). Readiness for Organizational Change; The Systematic Development of a Scale. *Journal of Applied Behavioral Science*, 2(43), 232-255.
- Hooi, G. (2007). The effects of culture on international banking disclosures. *Asia-Pacific journal of accounting & Economics*, 14(1), 7-25.
- Ismail, S., Siraj, S., and Baharim, S. (2018). Implementation of accrual accounting by the Malaysian federal government: Are the accountants ready? *Journal of Accounting & Organizational Change*, 14(2), 234-247.
- Kavanagh, M. H., and Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting & Finance*, 48(2), 279-300.
- Klein, J. K., and Knight, P. (2005). Innovation Implementation -Overcoming the Challenge. *American Psychological Society*, 14(5), 243-246.
- Klein, K., Con, A., and Sorra, J. (2001). Implementing Computerized Technology: An Organization Analysis. *Journal of Applied Technology*(86), 811-824.
- Lado, A., and Wilson, C. (1994, October). Human Resource Systems and Sustained Competitive Advantage: A competency-Based Perspective. *Academy of Management Review*, 19(4),
- Kavanagh, M. H., and Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting & Finance*, 48(2), 279-300.

- Lapsley, I. (1986). Capital Asset Accounting in UK Non-Trading Organizations. *Financial Accountability and Management*, 2(4), 273-293.
- Lapsley, I. R., Mussari, G., and Paulsson. (2009). On the Adoption of Accrual Accounting in the Public Sector: A Self-Evident and Problematic Reform. *European Accounting Review*, 18(4), 719-723.
- Li, T., and Calantone, R. J. (1998). The impact of market knowledge competence on new product advantage: conceptualization and empirical examination. *Journal of Marketing*, 62(4), 13-29.
- Luder, G. K. (1992). A Contingency Model Of Governmental Accounting Innovations In The Political Administrative Environment. *Research In Governmental and Nonprofit Accounting*, 7, 99-127.
- Maheshwari, S., and Vohra, V. (2015). "Identifying critical HR practices impacting employee perception and commitment during organizational change". *Journal of Organizational Change Management*, 28 (5), 872-894.
- Matekele, C. K., and Komba, G. V. (2020). The Influence of Demographic Attributes in the Implementation of Accrual-Based International Public Sector Accounting Standards. *Journal of Economics and Business*, 3(1). (n.d.).
- Mbelwa, L. (2015). Factors Influencing the Use of Accounting Information in Tanzanian Local Government Authorities (LGAs): an Institutional Theory Approach. *The Public Sector Accounting, Accountability, and Auditing in Emerging Economies.*, 15, 143-177.
- Mbelwa, L. H., Adhikari, P., and Shahadat, K. (2019). Investigation of the institutional and decision-usefulness factors in the implementation of accrual accounting reforms in the public sector of Tanzania. *Journal of Accounting in Emerging Economies*, 9(3), 335-365.
- Miller, D., and Friesen, H. (1982). Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum. *Strategic Management Journal*, 3(1), 1-25.
- Netemeyer, R. G., Johnston, M. W., and Burton, S. (1990). Analysis of role conflict and role ambiguity in a structural equations framework. *Journal of applied psychology*, 75(2), 148.
- Nunnally, J. C. (1978). Psychometric theory—25 years ago and now. *Educational Researcher*, 4(10), 7-21.
- Ochetan, C. M., and Ochetan, D. A. (2012). The influence of the economic and financial crisis on human resources management. *Procedia Economics and Finance*, 3, 769-774.
- Ouda, G. H. (2010). A Prescriptive Model Of The Transition to Accrual Accounting in the Central Government. *International Journal of Government Financial Management*, 1(1), 63-94.
- Paulsson, G. (2006). Accrual accounting in the public sector: experiences from the central government in Sweden. *Financial Accountability & Management*, 22(1), 47-62.
- Pollanen, R., and Loisel-Lapointe, K. (2012). Accounting Reform in the government of Canada: Explanatory Evidence on Accrual Accounting Adoption and Impact. *Financial Accountability & Management*, 28(4), 359-377.
- Potokri, C. (2014). Evaluation of availability of financial resources and manpower development in selected mono-technics in Nigeria. *Industry and Higher Education*, 28(5), 361-370.
- Ragupathi, D. (2013). The Employee Retention Practices of MNCS in Hyderabad. *Research Journal of Management Sciences* ISSN, 2319, 1171.

- Saa-Perez, P., and Garcia-Falcon, J. (2002). A resource-based view of human resource management and organizational capabilities development. *International Journal of Human Resource Management*, 1(13), 123-140.
- Spreitzer, M. (1995). Psychological Empowerment in the Workplace: Dimensions, Measurement, and Validation. *Academy of Management Journal*, 38(5), 1442-1465.
- Suddaby, R. (2010). Challenges for institutional theory. *Journal of management inquiry*, 19(1), 14-20.
- Tickcell, G. (2010). “Cash to Accrual Accounting: One Nation’s Dilemma”. *The International Business & Economics Research Journal*, 9(11), 71-79.
- Trivellas, P., Akrivouli, Z., Tsifora, E., and Tsoutsas, P. (2015). The impact of knowledge sharing culture on job satisfaction in accounting firms. The mediating effect of general competencies. *Procedia Economics and Finance*, 19, 238-247.
- Upping, P., and Oliver, J. (2011). Accounting Change Model For The Public Sector: Adopting Luder’s Model for Developing Countries. *International Review of Business Research Papers*, 7(1), 364-380.
- Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation science*, 4(1), 67.
- Weiss, C., and Murphy-Graham E., B. S. (2005). An alternate route to policy influence: How evaluation affect D. A. R. E. *American Journal of Evaluation*, 26(12), 12 - 28.

The Author

Dr. Alexander Otopah (DBA, CA)
Chief Accountant, Eastern Regional
Co-ordinating Council P.O. Box 303,
Koforidua - Ghana.

Examining the effects of the antecedents of the theory of planned behavior on intrapreneurial intention and the moderating role of perceived organizational support

Princewill Osaro Omorogiuwa

Junior Researcher, Swiss Business School, Flughafenstrasse 3, 8302 Kloten-Zurich, Switzerland

Professor of Practice, Hult International Business School, London Campus

Abstract

Academic scholarship over the last five decades has produced many empirical studies on the factors that affect entrepreneurship. Intrapreneurship research, however, lags in volume and domain specificity. Drawing on the “Theory of Planned Behavior” (TPB) and organizational support theory, this study aims to fill this research gap by investigating the antecedents of planned behavior theory and the moderating role of perceived organizational support. Quantitative data were collected using structured questionnaires in Accra, Ghana. Structural equation modeling was used to test the study’s hypotheses using SmartPLS 4. Findings from the research confirmed the validity of the Theory of Planned Behavior in predicting intrapreneurial intention. Perceived organizational support also had significant moderating effects. The practical implications of the study highlight the risk of normalizing business as usual and the importance of the role of supervisors and managers in encouraging intrapreneurship in organizations, as well as the need for training support and reward. This study is notable, being the first to investigate the moderating effect of perceived organizational support on the relationship between the antecedents of the Theory of Planned Behavior and intrapreneurial intention. In addition, it is also the first to investigate these relationships in a Ghanaian context.

Keywords: Intrapreneurship, intrapreneurial intention, theory of planned Behavior, perceived organizational support, attitudes, subjective norms, perceived behavioral control.

1. INTRODUCTION

The impact of entrepreneurship is being felt worldwide because of its role in job creation, energizing competition in markets, and innovation stimulation (Contin et al., 2007). The vagaries in the global business ecosystem suggest that, for existing firms to survive and gain a competitive advantage, they need to be innovative (Kuratko & Audretsch, 2013). This, in turn, requires the staff of organizations to willingly participate in entrepreneurial projects and initiatives for their organization to survive and thrive (Monsen et al., 2010). This is because the fundamental assumption is that innovative employee behavior affects the rejuvenation of organizational performance due to their access to new resources and the provision of vital skill sets (Kuratko & Audretsch, 2013). Consequently, according to Antoncic and Hisrich (2003), entrepreneurship research is expanding beyond the limited and narrow field of new venture creation to include entrepreneurship within organizations. This is probably because firm performance and growth depend on intrapreneurs’ ability to innovate and help revitalize their organization (Antoncic & Hisrich, 2001). As a bona fide field of research, intrapreneurship is gradually gaining recognition within management practice; therefore, a thorough appreciation of the variables and elements that influence intrapreneurial Behavior is of prime importance to organizations (Blanka, 2019).

Intrapreneurship, at the individual level, refers to employees’ risk-taking, innovative and proactive behaviors within the organization (Neessen et al., 2019).

These are employees with entrepreneurial capabilities exploiting environmental opportunities but nested within organizations. These intrapreneurs working with entrepreneurs are necessary for the success of any venture at any stage of its life cycle because, according to Augusto Felicio et al. (2012), these individuals help to rein-vigorate businesses by their ability to adapt to changes happening externally by innovating and enhancing the organization's internal performance. Intrapreneurship is essential because, according to Skarmeas et al. (2016), intrapreneurs can improve an organization's present and future performance through innovation-driven dynamic capabilities and, by so doing, enhance the understanding of the market while also developing new market insights. Furthermore, there are also implications for national development, as expressed by Oteuliev (2015), who argued that intrapreneurship, through its effect on organizational re-engineering, can catalyze a nation's economic development and growth.

Identifying individuals with intrapreneurial intentions is vital because entrepreneurship and intrapreneurship offer different benefits and cost outcomes. Since people are likely to differ in their attitudes toward these outcomes, we might expect individuals to prefer one over the other based on their attitudes toward salient outcomes and their perceived entrepreneurial abilities (Douglas & Fitzsimmons, 2013). Therefore, it can be argued that those organizations that can identify and recruit people with an intrapreneurial disposition may have an advantage over those engaged in a hit-and-miss approach to recruiting new team members.

Intrapreneurship within organizations is not yet widely adopted (Huang et al., 2021), although the interest in this specific research domain has increased over the last ten years (Alam et al., 2020). As a focus of intrapreneurship research, Ghana has received much less attention. Furthermore, the geographical insight matters because, according to Elert et al. (2019), intrapreneurship varies geographically, with Nordic countries at the forefront of intrapreneurship practice at 9% prevalence, eastern European, middle eastern, and broadly, developing nations having significantly less prevalence. Yet, intrapreneurship is considered a critical strategic resource for organizations and can help bring about sustainable advantage for firms (Urbano and Turro, 2013) and contribute to national development (Oteuliev, 2015). This investigation applied the theory of planned Behavior (TPB) (Ajzen, 1991) as the theoretical framework to determine the intrapreneurial intention of employees in Ghana. The ability of the TPB and its antecedents of attitudes, subjective norms, and perceived behavioral control to predict intention has been confirmed empirically in psychology and sociology in many domains (Armitage & Conner, 2001; Ajzen & Kruglanski, 2019; Ajzen, 2020; Hirschey et al., 2020) but not with intrapreneurship in Ghana.

Perceived organizational support focuses on the conditions within an organization that encourages or discourages the activities of intrapreneurs (Kumar & Parveen, 2021). The organizational setting permits the use of organizational assets and resources (Blanka, 2019). This paper, in line with the work of Christensen (2005) and Kumar and Parveen (2021), focuses on the internal conditions that encourage intrapreneurship in Ghanaian organizations. Research by Neessen et al. (2019), through an extensive and systematic review of the literature, identified organizational conditions for intrapreneurship. Therefore, organizational support theory (Rhoades and Eisenberger, 2002) provides an important and valuable theoretical framework for understanding individual entrepreneurial Behavior in organizations. Yet, according to Rhoades and Eisenberger (2002), further examination is still needed to know how the boundary conditions of the theory influence employee attitudes and behaviors. This aligns with the conclusion reached by Zampetakis et al. (2009), where the scholars noted that despite the acknowledged importance of POS to outcomes that are favorable to both employees and the organization, empirical research on the potential influence of POS on entrepreneurial Behavior within organizations is scarce. The recent contribution by Kumar and Parveen (2021) in the Indian context provides further illumination into the organizational factors affecting intrapreneurship. There is further evidence that organizational support can predict and enable intrapreneurial Behavior (Gonzalez-Serrano et al., 2018; Guven, 2020; Chouchane et al., 2021) and enable the stimulation of new ideas (Reibenspiess et al., 2020). This investigation, therefore, expects that perceived organizational support will influence the intrapreneurship intentions of employees in Ghana.

Therefore, as the marketplace changes, not least due to the COVID-19 global pandemic, the internal conditions within the organization must be supportive of intrapreneurs. This is only possible when there is an organizational.

These are employees with entrepreneurial capabilities exploiting environmental opportunities but nested within organizations. These intrapreneurs working with entrepreneurs are necessary for the success of any venture at culture that enables the firm to adapt and benefit from the changing environment (Jeong et al., 2006). This study further investigates the role perceived organization supports play in moderating the effects of the antecedents of intrapreneurial intention because, according to Mustafa et al. (2018), more research is needed to identify and shed light on the fundamental dimensions of employee intrapreneurial behaviors and the conditions that inhibit or enable performance. This research study will contribute to the body of knowledge on intrapreneurship as a domain by shedding light on its antecedents as well as the organizational conditions that will impede or make it thrive within organizations in Ghana.

2. LITERATURE REVIEW

The theory of planned Behavior

The Theory of Planned Behavior was necessitated by the limitations of the original model, the theory of reason action (Ajzen & Fishbein, 1980). The main issue was with behaviors of incomplete volitional control (Ajzen, 1991). The theory posits that the individual's beliefs about their attitude, norms, and control affect their Behavior through intentions (Kautonen et al., 2015). Ajzen (2011) defines intention as a person's eagerness to participate in or undertake a particular behavior.

TPB has strong empirical support and has been tested across different behavioral fields. For example, Sheeran (2002) found that when intentions were correctly operationalized, they were good predictors of Behavior. Also, Ajzen (2020), drawing on a meta-analysis of research findings from Riebl et al. (2015); McDermott et al. (2015), and Hirschey et al. (2020); commented that indices made up of antecedents of intention correlate as one would expect to the direct measure of perceived behavioral control (PBC), subjective norms, and attitudes. Together they explain a significant amount of variance in intentions.

In the entrepreneurship field, one of the most tested theories in the study of entrepreneurial intentions is the planned behavior theory (Lortie & Castogiovanni, 2015). For this reason, Ajzen (1991), Bird (1988), and Krueger et al. (2000) argue that when any planned behavior is uncommon and challenging to observe, then the intention will be the reliable indicator in the prediction of that Behavior. This is thus applicable in the context of predicting intrapreneurial intention.

Intrapreneurial Intention

Despite the interest in intrapreneurship, the thrust of scholarly research has focused on the individual's intention to become an entrepreneur. That is the intention to start a new enterprise and become an owner-manager (Fitzsimmons & Douglas 2011). Consequently, empirical research that focuses on the antecedents of intrapreneurial intentions has been scarce; excluding the effort by Monsen et al. (2010), the focus has been on the antecedents of entrepreneurial intentions (Douglas & Fitzsimmons, 2013). For example, Carter et al. (2003) investigated the reasons for career choices between non-entrepreneurs and entrepreneurs but failed to consider intrapreneurs. Similarly, Shaver et al. (2001) looked at the reasons for starting a new business but not for doing the same within an organization. Parker (2011) seems to go farthest about the influence of cognition when it was noted that entrepreneurs would seek more independence. In contrast, intrapreneurs tend to be more risk-averse and more welcoming of the protective organizational environment. This view is supported by empirical evidence from Douglas and Fitzsimmons (2013) and Pinchot (1985) that entrepreneurial behaviors are also found among employees within organizations (Pinchot, 1985).

Attitudes

According to Ajzen (2005), an attitude is a predisposition to respond positively or negatively towards a target,

e.g., an event, object, institution, or person. Ajzen (2020) further explains that people form attitudes by their beliefs about the object of that attitude. In the context of this study, this will relate to beliefs about intrapreneurship. According to De Jong et al. (2011) and Neessen et al. (2019), proactivity, risk-taking, and innovativeness are at the core of intrapreneurship. In addition, Gawke et al. (2019) have empirically demonstrated the positive relationship between intrapreneurship and the propensity to take risks.

Similarly, in their research, Neessen et al. (2019) found a link between proactivity and intrapreneurship. It can therefore be concluded that intrapreneurship is focused on the innovativeness and risk-taking attitude in the organization (Farrukh et al., 2017). Thus, those who are primed for intrapreneurship or most likely to be able to thrive in conditions of uncertainty and also take risks. These ultimately represent actions and attitudes that encourage innovation and challenge existing organizational practices (Tisu et al., 2021). In another study, Adachi and Hisada (2017) found that those who were less venturesome tended to be less intrapreneurial. Thus, in line with the literature about the characteristics of intrapreneurs, their tendencies towards innovative Behavior, risk-taking and proactivity will make them more likely to have intrapreneurial intentions.

We, therefore, hypothesize that;

H1o: There is no or negative relationship between attitude and intrapreneurship intention.

H1a: There is a positive relationship between attitude and intrapreneurship intention.

Subjective Norms

This refers to the perceived social influence to partake or not to partake in the Behavior under consideration. Subjective norms relate to the extent to which the individual is impacted by the approval or disapproval of important referents or groups (Ajzen, 2020). These important referents are typically members of one's family, important others, and close friends. In this study, the referents are more likely to be work colleagues, bosses, and subordinates of the intrapreneur. This is consistent with the work of Parker (2011) on American adults aged 18 and over, who found that nascent intrapreneurs are influenced by stimuli in their work environment as opposed to nascent entrepreneurs, who are more externally influenced by individuals in their social space.

Subjective norms are also the product of one's normative belief and motivation to comply. The salient beliefs are about an individual's belief that salient referents think a behavior ought to be performed or not performed (Ajzen & Fishbein, 1980). This line of thinking aligns with Rigtering and Weitzel's (2013) work. The scholar's research on employees within six Dutch companies indicated that the level of trust in managers also affects intrapreneurial Behavior. Urbano and Turro (2013), in a detailed examination of network factors in the intrapreneurship context, used Global Entrepreneurship Monitor data from nine European countries - Denmark, Finland, France, Greece, Ireland, and the Netherlands. Italy, Spain, and the United Kingdom - reveal that an employee's network influences the likelihood of intrapreneurship. Thus, it can be inferred that employee network ties affect individual and team-level intrapreneurship. This then begs the question of whether such network ties enable the development of intrapreneurial Behavior (Blanka, 2019). Considering the nature of intrapreneurship behavior, their risk-taking tendencies, and the contention that they engage in this Behavior with the full realization that they would not endear themselves to workmates, it is logical that intrapreneurs are unlikely to consider the influence of "important referents" in their motivation to comply. Furthermore, because intrapreneurs tend to want to deviate from the norm and shunt established processes and procedures, they are expected to swim against the corporate tide (Corbett, 2018); therefore, it is hypothesized that;

H2o: There is no or negative relationship between subjective norms and intrapreneurial intention.

H2a: There is a negative relationship between subjective norms and intrapreneurial intention.

Perceived behavioral control (PBC)

Perceived behavioral control is the perception of how challenging or easy it is to act out a particular behavior (Ajzen, 2020). However, for behaviors not under the complete volition control of the person, they will need to demonstrate that they have access to the resources they need to carry out the Behavior (Ajzen, 2020). Several factors can be attributed to control beliefs, including experiences from friends, indirect information concerning the Behavior under consideration, and previous experience. All these factors tend to accentuate or lower the perceived difficulty in carrying out the Behavior under focus (Ajzen, 2020).

In intrapreneurship, it is self-evident that the likelihood of exhibiting a particular behavior is dictated by the resources and opportunities available to the individual; thus, Ajzen (1991; 2012) argues that this perception of behavioral control is deemed more important than the actual control because of the impact it has on intentions and subsequent actions.

Ajzen (1991; 2012), therefore, argues that PBC, as operationalized within the TPB, can effectively predict behavioral intention. This view receives support from studies by Doane et al. (2014), and Maresch et al. (2016) that confirm that perceived behavioral control predicts behavioral intention generally. More specifically, in their Austrian study on business, science, and engineering students across 23 institutions, Maresch et al. (2016) found that resources such as entrepreneurial education can impact the intention to act entrepreneurially. Thus, when an individual assesses that they have more resources and anticipate fewer impediments, then the stronger will be their perception of their control of the given Behavior (Ajzen, 2020). This is the situation with intrapreneurship, where there are more likely to be organizational constraints to exhibiting intrapreneurial Behavior. Intrapreneurship intention can be directly influenced by the perception of control on the part of the intrapreneur. We, therefore, hypothesize that;

H3o: There is no or negative relationship between perceived behavioral control and intrapreneurship intention.

H3a: There is a positive relationship between perceived behavioral control and intrapreneurship intention.

Attitude and Perceived Organizational support

The attitude towards any behavior is often reflected in the negative or positive evaluation of the Behavior under review, in this instance, intrapreneurial Behavior. Research confirms that when Behavior cannot be observed, the intention toward that Behavior is a good predictor of that Behavior Sheeran (2002; Fishbein & Ajzen, 2011). Ajzen (2020) cautions about the relative significance of the antecedents to behavioral intention. The scholar argues that these antecedents can fluctuate depending on the studied behaviors and contexts. One such contextual scenario will be the organizational conditions that can potentially influence the intrapreneurial intentions of employees. More specifically, this study examines the interaction between these antecedents of intrapreneurial intention and perceived organizational support (POS).

According to planned behavior theory, intention is the best predictor of Behavior. This, in turn, is influenced by beliefs and attitudes toward the outcomes of the Behavior (Ajzen, 2020). Therefore, when there is a strong attitude towards the outcomes, there will be a stronger intention to act or behave to achieve the intended outcome (Douglas & Fitzsimmons, 2013). This implies that when employees evaluate the outcomes of acting intrapreneurial within their organizations, they are more likely to have strong intentions to act in like manner and carry out their intentions. Thus, the interaction between the attitudes of employees towards intrapreneurship and the context of the conditions within the organization needs to be considered. This will require an organizational climate that supports and rewards employees for their in-role and extra-role performance because, according to Zampetakis et al. (2009), employees are more likely to feel obligated to the organization and reciprocate in both their behaviors and attitude in response to the perceived support from the organization. However, the mechanisms by which POS

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Furthermore, Rhoades and Eisenberger (2002), Wombacher and Felfe (2017), and Kurtessis et al. (2017) contend that employees with high levels of POS will show more commitment to their employers and express more satisfaction towards their jobs. When employees have high levels of POS, the reciprocity norm motivates them to help the organization reach its goals and objectives (Rhoades & Eisenberger, 2002; Riggle et al., 2009). Eisenberger et al. (2001), Ahmed et al. (2015), and Avanzi et al. (2014) conclude that the more employees perceive they are receiving support from their employers, the more they are bound to experience a sense of obligation and be motivated to reciprocate in both behavioral and attitudinal ways. These employees, whom we describe as intrapreneurs, tend to go over and above the regular call of duty and responsibilities (George & Brief, 1992; Cheung, 2013).

High levels of POS are associated with greater affective attachment to the organization (Eisenberger et al., 1990; Paul & Phua, 2011; Ahmed et al., 2015) because, based on the reciprocity norm (Gouldner, 1960), the existence of greater POS will result in the sense of obligation to engage in behaviors or develop attitudes that reciprocate how staff perceives their employer is treating them. This increases the likelihood that the employee will interpret the organization's successes and failures as their own. This makes them have a positive evaluation bias in gauging the organization's actions (Eisenberger et al., 1986; Kurtessis et al., 2017).

Finally, Rhoades and Eisenberger's (2002) meta-analysis found a highly statistically significant relation between POS and performance. Their review reported that the relationship between POS and extra-role performance, involving activities that aid the organization but are not explicitly required of employees, was stronger than the relationship between POS and performance of standard job activities (in-role performance) (Chen et al., 2009). This distinction between in-role and extra-role performance differentiates intrapreneurs from other staff working in an organization. And the meta-analysis conducted by the scholars was able to demonstrate a role for POS. Therefore, extending the notion that POS nurtures a favorable attitude toward Behavior benefiting the organization, we expect that POS should positively affect a user's attitude (Marler et al., 2009). In light of the above, it is hypothesized that;

H4o: There is no or negative relationship between attitude and intrapreneurship intentions when perceived organization support is high rather than low.

H4a: There is a positive relationship between attitude and intrapreneurship when perceived organization support is high rather than low.

Subjective norms and perceived organizational support

Subjective norms are normative and reflect beliefs about what important others expect us to do or not do. These are referred to as normative beliefs. These normative beliefs, together with the motivation to comply with others, known as significant referents, result in subjective norms or perceived social pressure to carry out or not to carry

out the Behavior in question. Subjective norms are determined by the normative motivation to comply, and the normative beliefs that individuals have that make them want to comply with the desires of the important referents (Ajzen, 1991; Ajzen, 2020). In this study, the referents are more likely to be from work, bosses, colleagues, subordinates, and colleagues. More critical to intrapreneurs are those that control resources (Parker, 2011).

In contrast to the perceptions of broader organizational support represented by POS, subjective norms address an individual's perceptions that they should perform a specific behavior due to social expectations. Findings on the impact of subjective norms have been mixed; for example, Rhodes and Quinlan (2015) on physical activity, Chen and Feely (2015) on binge drinking, and Pahang et al. (2021) on the use of pesticides in a Malaysian study all did not find support for subjective norms prediction behavior. Similarly, a meta-analysis by Cooke and French (2008) indicated that subjective norms contribute little to explaining behavioral intention. Conversely, other studies from other scholars have found strong support for the relationship between subjective norms and behavioral intention (Gopi & Ramayah, 2007; Todd & Mullan, 2011 & Sahli & Legohérel, 2015). It should be noted that none of the research above has taken place within the context of intrapreneurship, its organizational boundary conditions, or on the continent of Africa or in Ghana specifically. Within organizations, managers expect subordinates to comply with directives to fulfill the organization's goals. Therefore, it is expected that managers will prefer the fulfillment of in-role requirements of the job and not any extra-role performance that characterizes intrapreneurship through their proactive, risk-taking, and innovation-seeking activities of employees. These managers ensure compliance via the control of resources (Pandey et al., 2021). We expect that this forced compliance and, by implication, the inability to express their creative abilities in problem-solving will create a perception of low organizational support. This is so because employees personify the organization through their relationships and interactions with their managers and supervisors (Rhoades & Eisenberger, 2002; Zheng et al., 2016). Therefore, we hypothesize that:

H5o: There is no or positive relationship between subjective norms and intrapreneurial intention when POS is low rather than high.

H5a: There is a negative relationship between subjective norms and intrapreneurial intention when POS is low rather than high.

Perceived behavioral control and perceived organizational support

Perceived behavioral control is the perception of the extent of difficulty or ease of acting out a particular behavior. It becomes particularly important when there is less volitional control. This is typical within organizations where there will be rules, processes, and policies regulating resource access and use (Ajzen, 1991; 2020). According to Ajzen (1985; 2020), intrapreneurship behaviors depend on access to resources such as skills, money, time, opportunities, and support from others. This is why Monsen et al. (2010) argued that researchers need to understand the conditions within organizations that encourage intrapreneurship. The insights offered by Alpan et al. (2010) are instructive when they focus on the need for access to organizational resources by intrapreneurs for them to be able to develop their innovative ideas. This leads us to the perception of organizational support that encourages employee effort and commitment (Rhoades & Eisenberger, 2002; Reuther et al., 2018) because for intrapreneurship to work, top management vision and the intrapreneurial activities need to align (Blanka, 2019). This is because management provides employees with tangible resources (e.g., pay and rewards) and intangible (e.g., justice and support) elements (Shukla & Rai, 2015). Intrapreneurs need to understand and be clear about how these inputs are distributed because it influences their perception of organizational support. Based on organizational support theory (Eisenberger et al., 1986), three general forms of perceived favorable treatment received from the organization should increase POS. They are organization rewards and job conditions, supervisor support, and fairness. Specifically, fairness relates to the ways used to determine the distribution of resources among employees, and repeated instances of fairness in decisions concerning resource distribution should have a strong cumulative effect on POS by indicating a concern for employees' welfare (Baran et al., 2012).

This would imply that PBC over intrapreneurial intention will be strengthened in situations where there is an increase in the perception of organizational support, especially about the distribution of resources that will contribute to the expression of intrapreneurial behaviors. Therefore, it is expected that PBC will be stronger and more likely to lead to intention in situations where POS is available to the intrapreneur.

In addition, Proenca (2014) also argues that perceived organizational support can influence how employees respond when given greater access to resources. However, other scholars believe that workers may perceive an organization's efforts to provide more resources as motivated by self-interest rather than genuine and legitimate concern for the workers' well-being (Crocker et al., 2017). The scholars claim that under such circumstances, employees will likely view the organizational initiative as manipulative and not empowering. POS can counter these negative perceptions by creating a feeling among employees that the organization truly cares about their well-being and ability to succeed at the job (Proenca (2014). The reciprocity norm also implies that employees with high POS will feel morally obliged to respond to the organization's offer of better resources through positive in-role and extra-role behaviors (Wong et al., 2012). They are likelier than employees with low POS levels to see access to resources as an opportunity to improve capability and expand choice.

On the other hand, employees who perceive low organizational support may feel no commitment to using the resources provided. They are likely to lack the confidence that management will back their efforts. In short, workers with higher levels of POS will experience greater empowerment from access to resources than employees with lower POS levels (Proenca, 2014). We hypothesize, therefore, that:

H5o: There is no or positive relationship between subjective norms and intrapreneurial intention when POS is low rather than high.

H5a: There is a negative relationship between subjective norms and intrapreneurial intention when POS is low rather than high.

3. METHODOLOGY

Research design

This cross-sectional study used a quantitative approach and an explanatory design. The target population was employed MBA students studying in three universities in Accra, Ghana. The three institutions were purposively selected from a sample of 16 institutions in Accra based on being the largest three by student enrolment. The total population was 1510 employees, and they came from various industry sectors. A sampling frame consisted of all the students enrolled in the program. A census was therefore employed. A structured questionnaire hosted online was distributed to all the students. Common method bias was accounted for using recommendations from Podsakoff et al. (2003). This involved using different scales and reverse coding items. The questionnaire had 60 items.

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The first set of questions on the questionnaire was screening questions. This comprised eight items of the Employee Intrapreneurship Scale developed by Gawke et al. (2019). The screening questions were used to screen out those who did not have intrapreneurial tendencies. This approach is consistent with Martiarena's (2013) work, where the scholar used the screening approach to differentiate between intrapreneurs, independent entrepreneurs, and employees. The responses were given on a Likert 5-point scale ranging from 1 (strongly Disagree) to 5 (strongly Agree).

An example question is, “I undertake activities to reach new markets or communities for my organization.” The constructs from the theory of planned Behavior (Ajzen,1991), intrapreneurial intention, attitude, subjective norms, and perceived behavioral control were measured using an adapted scale from Ajzen et al. (2004). The three independent variables were measured using a Likert 5-point scale. Example questions attitude, subjective norms, and perceived behavioral control respectively are; “It is beneficial to me to become an Intrapreneur”; “Most of the people I respect and admire will act intrapreneurially in their organizations”; and “I am confident that I can act intrapreneurially.” The dependent variable, the intrapreneurial intention, was rated using a Likert scale 7-point scale ranging from 1 (strongly Disagree) to 5 (strongly Agree). Perceived organizational support was measured with an 8-item validated Likert 5-item scale from Rhoades et al. (2001). The scale measured responses from 1 (strongly Disagree) to 5 (strongly Agree). An example question is, “My Organization really cares about my well-being.” The control variables included age, gender, experience level, managerial level, firm size, and organization type, all used dummy variables.

Table 1 below shows the constructs and their respective sources.

Table 1: Summary of scale construct

| Construct | Items | Sources |
|----------------------------------|-------|-----------------------|
| Employee Intrapreneurship Scale | 8 | Gawke et al. (2019) |
| Theory of Planned Behavior | 15 | Ajzen (1991) |
| Perceived Organizational Support | 8 | Rhoades et al. (2001) |

Of the 1510 employees targeted, 433 responses were received. Out of this, 13 were identified as unemployed; therefore, they were unsuitable for this study. A further 51 were screened out because they scored less than three on the screening scale and were therefore omitted from further analysis. The remaining 369 were subject to further analysis. Non-response bias was computed by comparing the responses of the participants who filled out the online survey early (first three days) and those who did so after several reminders and found no significant difference between the two groups. The response rate of 24.4% was consistent with the 29% achieved from the Slovenian sample and better than the 11% from the American sample in a critical study conducted by Antoncic and Hisrich (2001). It also compared favorably with the 6.5% response rate to an intrapreneurship email survey by Antoncic and Antoncic (2011). Alpkan et al. (2010), in their study of intrapreneurship and organizational support, achieved an 11% response rate. Kautonen et al. (2015) achieved 7% and 23% from two different populations in their TPB study. Also, Kumar and Parveen (2021) had 21.9% in their Indian sample.

The data were analyzed using the structural equation modeling technique of partial least squares, PLS 4 (Ringle et al., 2022), to assess the applicability of the theory of planned Behavior on intrapreneurial intention among employees. This analysis technique is not affected by the size of the sample or the data distribution, and it is the ideal approach for theory application in structural equation modeling (Hair et al., 2017).

4. RESULTS

Demographic characteristics of the respondents

The demographic characteristics of the respondents to the survey are shown in Table 2 below.

Table 2: Background Information

| Variables | Frequency (n) | Percentage (%) |
|------------------------------|---------------|----------------|
| GENDER | | |
| Male | 200 | 54.2 |
| Female | 169 | 45.8 |
| Total | 369 | 100.0 |
| AGE GROUP | | |
| 18-24 years | 8 | 2.2 |
| 25-34 years | 89 | 24.1 |
| 35-44 years | 176 | 47.7 |
| 45-54 years | 93 | 25.2 |
| 55+ years | 3 | 0.8 |
| Total | 369 | 100.0 |
| POSITION IN THE ORGANIZATION | | |
| Entry/Junior Level | 31 | 8.4 |
| Middle Level | 162 | 43.9 |
| Senior Level | 176 | 47.7 |
| Total | 369 | 100 |
| NUMBER OF YEARS EMPLOYED | | |
| Below 5 years | 38 | 10.3 |
| 5-10 years | 107 | 29 |
| 10-15 years | 101 | 27.4 |
| 15+ years | 123 | 33.3 |
| Total | 369 | 100 |

| Variables | Frequency (n) | Percentage (%) |
|--|---------------|----------------|
| NUMBER OF FULL-TIME EMPLOYEES IN THE ORGANIZATION | | |
| 1-10 | 9 | 2.4 |
| 11-50 | 43 | 11.7 |
| 51-100 | 99 | 26.8 |
| 101-250 | 115 | 31.2 |
| 250 and above | 103 | 27.9 |
| Total | 369 | 100 |
| SECTOR OF EMPLOYMENT | | |
| Manufacturing | 88 | 23.8 |
| Services | 211 | 57.2 |
| Extraction | 11 | 3 |
| Agriculture | 3 | 0.8 |
| Construction | 8 | 2.2 |
| Education | 27 | 7.3 |
| Civil Service | 15 | 4.1 |
| Not for Profit | 6 | 1.6 |
| Total | 369 | 100 |

Source: Authors own calculations

Measurement Model Analysis

The measurement model analysis involves a test of the psychometric properties of the scales/constructs using reliability, convergent validity, and discriminant validity (Hair et al., 2017). All five study constructs had Cronbach's alphas, rho A, and composite reliability values above 0.70 (Hair et al., 2016). Also, all five study constructs had average variance extracted values above 0.50, as shown in Table 3. The results imply that the five-construct model has met reliability and convergent validity.

Table 3: Reliability and Validity

| Constructs | Cronbach's alpha | rho_A | Composite reliability | Average variance extracted (AVE) |
|-----------------------------------|------------------|-------|-----------------------|----------------------------------|
| Attitude | 0.744 | 0.757 | 0.842 | 0.576 |
| Intrapreneurship intention | 0.886 | 0.887 | 0.929 | 0.814 |
| PBC | 0.760 | 0.785 | 0.892 | 0.805 |
| POS | 0.893 | 0.900 | 0.918 | 0.652 |
| Subjective Norm | 0.876 | 0.877 | 0.916 | 0.732 |

Source: Authors own calculations

After the assessment of reliability and convergent validity, the next stage is the assessment of discriminant validity. Discriminant validity shows the uniqueness of the constructs used in the study. This study assessed discriminant validity using the heterotrait-monotrait ratio (HTMT) of correlations between the constructs (Henseler et al., 2015). From table 4, all the HTMT values were below 0.85, showing that discriminant validity has been met.

Table 4: Heterotrait-monotrait ratio (HTMT) 0.85 criterion

| | Attitude | Intrapreneurship intention | PBC | POS | Subjective Norm |
|----------------------------|-----------------|---------------------------------------|------------|------------|----------------------------|
| Attitude | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Intrapreneurship intention | 0.778 | 0.000 | 0.000 | 0.000 | 0.000 |
| PBC | 0.428 | 0.449 | 0.000 | 0.000 | 0.000 |
| POS | 0.489 | 0.540 | 0.178 | 0.000 | 0.000 |
| Subjective Norm | 0.434 | 0.467 | 0.449 | 0.256 | 0.000 |

Source: Authors own calculations

Structural Model Analysis and Hypotheses Testing

The structural model was estimated using PLS (version 4) (Ringle et al., 2022). The significance of each path was assessed using bootstrapping (5000-subsamples), a procedure available in PLS (Hair et al., 2021). The results showed that five of the six structural paths were statistically significant, as shown in table 5, Figures 1 and 2.

Table 5: Path Analysis-Hypothesis Testing

| Hypothesis | Structural Path | Path Coefficients | t-value | p-value | Hypothesis Result |
|-------------------|---|------------------------------|----------------|----------------|------------------------------|
| H1 _a | Attitude -> Intrapreneurship intention | 0.373 | 7.545 | 0.000*** | Supported |
| H2 _a | Subjective Norm -> Intrapreneurship intention | 0.184 | 4.694 | 0.000*** | Not supported |
| H3 _a | PBC -> Intrapreneurship intention | 0.123 | 2.775 | 0.006** | Supported |
| H4 _a | POS x Attitude -> intrapreneurship intention | -0.113 | 2.445 | 0.015* | Not Supported |
| H5 _a | POS x Subjective Norm -> Intrapreneurship intention | -0.124 | 2.098 | 0.036* | Supported |

***p<0.001; **p<0.01; *p<0.05

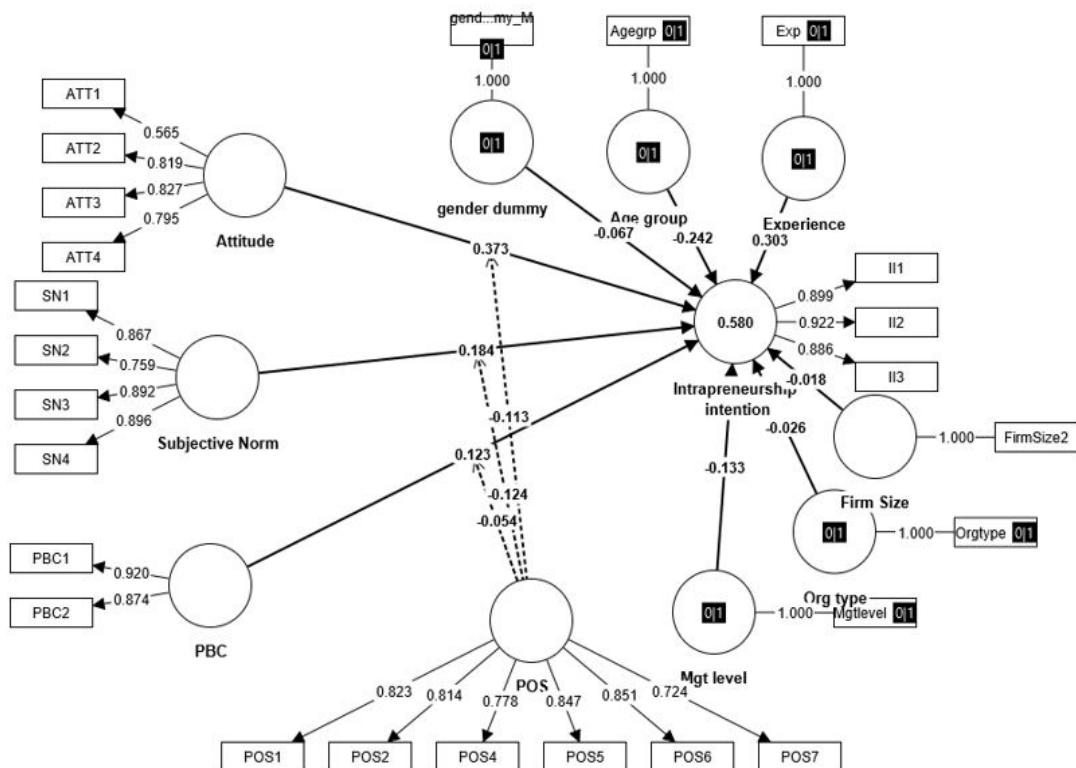


Figure 1: Structural path – Regression weight.

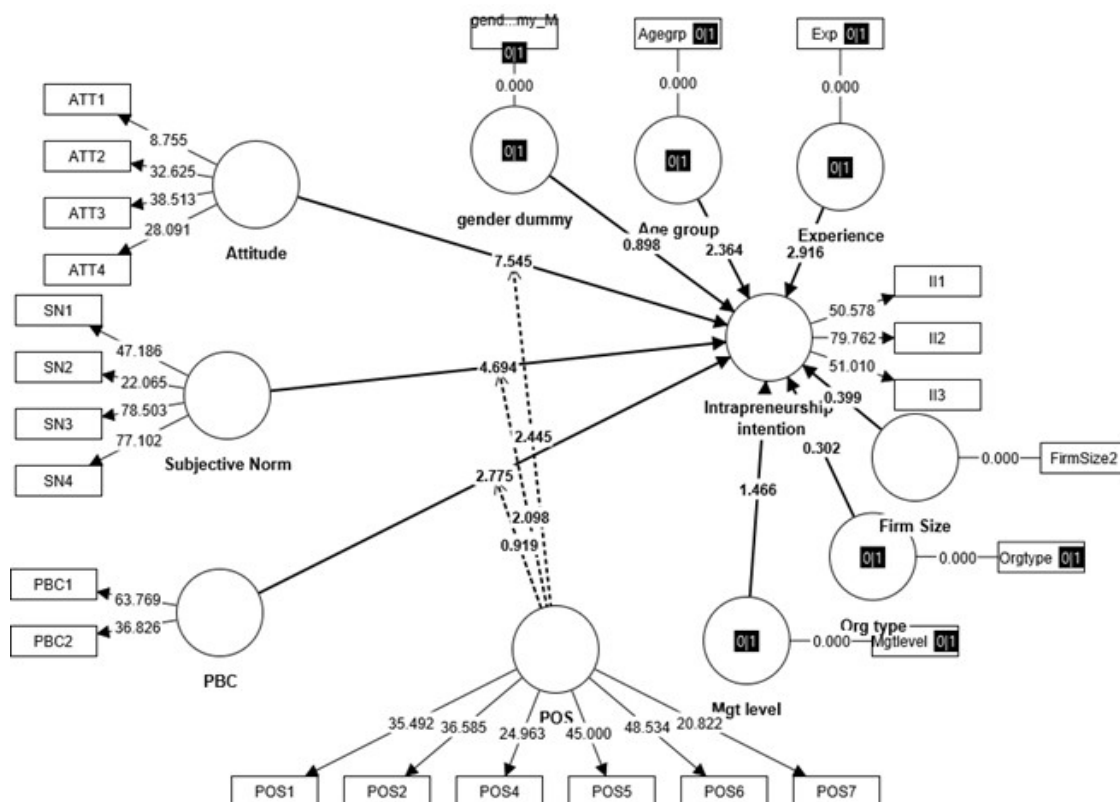


Figure 2: Structural path-t-values

Regarding the direct hypotheses, a significant positive relationship was obtained between attitude and intrapreneurship intention ($\beta=0.37$, $t=7.54$, $p=0.000 < 0.001$), thus supporting hypothesis **H1a**. Also, a significant positive relationship was obtained between subjective norm and intrapreneurial intention ($\beta=0.18$, $t=4.69$, $p=0.000 < 0.001$), therefore, hypothesis **H2a** was not supported in the present context since the researcher had hypothesized a negative effect of subjective norm on intrapreneurship intention. Additionally, a significant positive relationship was obtained between perceived behavioral control and intrapreneurial intention ($\beta=0.12$, $t=2.78$, $p=0.006 < 0.01$), thus supporting hypothesis **H3a**.

Perceived organizational support had a significant negative moderating effect on the relationships between attitude and intrapreneurial intention ($\beta=-0.11$, $t=2.45$, $p=0.015 < 0.05$). This means that perceived organizational support weakens the positive effect of attitude on intrapreneurial intention. Therefore, hypothesis **H4a** is not supported. The moderating slope explaining the negative moderating effect of POS on attitude and intrapreneurial intention is presented in figure 3.

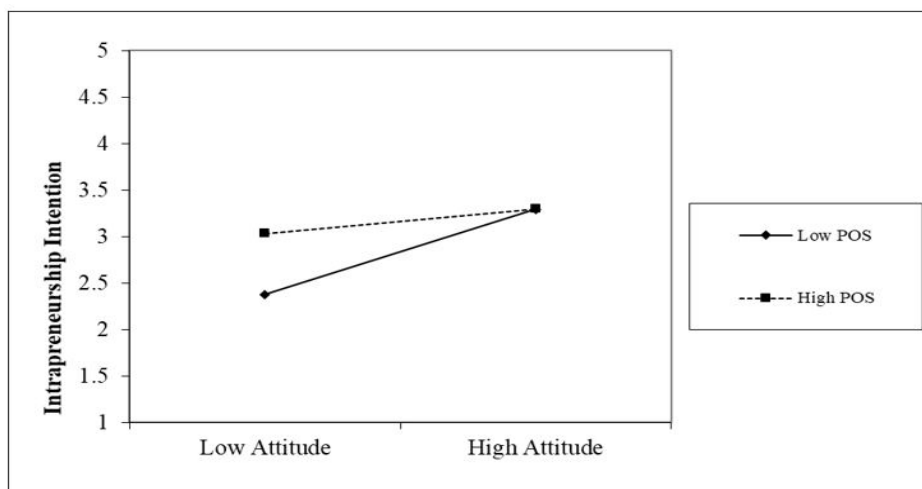


Figure 3: The negative moderating effect of perceived organizational support on the relationship between attitude and intrapreneurship intention.

Also, perceived organizational support had a significant negative moderating effect on the relationships between subjective norm and intrapreneurial intention ($\beta=-0.12$, $t=2.10$, $p=0.036 < 0.05$). This means that perceived organizational support weakens the positive effect of subjective norms on intrapreneurial intention. Therefore, hypothesis **H5a** is supported. The moderating slope explaining the negative moderating effect of POS on subjective norms and intrapreneurial intention is presented in figure 4.

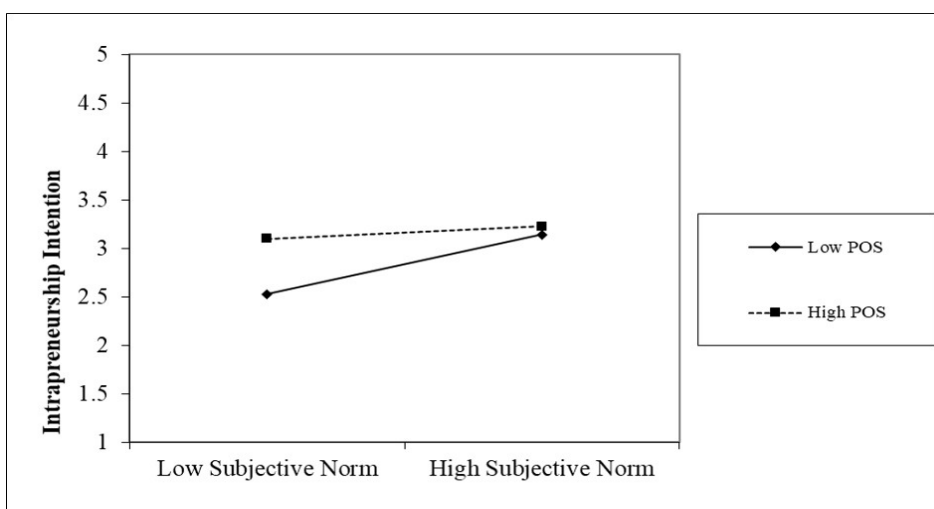


Figure 4: The negative moderating effect of perceived organizational support on the relationship between subjective norm and intrapreneurship intention

Concerning the sixth hypothesis, the moderating effect of POS on PBC and intrapreneurial intention was not significant; therefore, hypothesis **H6a** is not supported.

5. DISCUSSION

This research hypothesized that there would be a positive relationship between attitudes and intrapreneurial intentions. The findings of the research strongly supported this hypothesis. This adds to the work by Ajzen (1991), who reported after an analysis of 16 studies conducted over five years in various contexts that attitudes strongly contribute to the prediction of intrapreneurial intention. This is also consistent with the findings by Linan and Chen (2009) and Kautonen et al. (2015) about the relationship between attitude and intention. According to Farrukh et al. (2021), the intrapreneurship concept is associated with attitudes related to proactivity, risk-taking, and innovativeness. This positive relationship with intention could also result from the characteristics of the population investigated: employees studying for an MBA. For example, Urbano and Turro (2013) and Martiarena (2013) found that employees with higher levels of education will tend to be more intrapreneurial than those with a lower level. According to Huang et al. (2021), self-attitude, which includes personal initiative, proactivity, and entrepreneurial self-efficacy, can influence their judgment about rewards, risk, organizational identification, and probability of venture success. Curiously, moderating the relationship between attitude and intrapreneurial intention with POS revealed a significant relationship but in the opposite direction. This presents an interesting finding and speaks to the importance of organizational conditions in the study of intrapreneurship. The strong negative relationship warrants further explanations for at least two reasons. The first reason is that those with stronger attitudes towards intrapreneurship may hold this attitude despite what the organizations may be doing. This may be a result of experience or tenure within the same organization. They may have become so habituated to this situation that it now seems like business as usual for the employees (Boateng, 2014). The other reason points to the exchange theory (Blau, 1964). Staff with a strong disposition toward intrapreneurship do not feel that what they get in return is commensurate with the effort they are putting in.

This study hypothesized that there would be a negative relationship between subjective norms and intrapreneurial intention. This was because intrapreneurs want to carry on regardless of what important referents thought about the Behavior. However, the findings from this study did not support this hypothesis. The results showed a strong positive relationship between subjective norms and intrapreneurial intentions. This was a surprising finding but consistent with the work of Munir et al. (2019), who found a positive relationship with entrepreneurship intention amongst Pakistani students. Similarly, Sieger and Monsen (2015), in their study of over 15,800 students from 13 European countries, also found support for the positive relationships between subjective norms and entrepreneurship and employment. Finally, Urban and Chanston (2019) and Wang et al. (2021), in their South African and Chinese studies, respectively, also found a positive relationship between subjective norms and intrapreneurial intention. A possible explanation for the findings of this study may be the strength of the motivation to comply in a work environment in Ghana as well as the normative beliefs about their bosses' expectations at work. The work culture may not support or condone brinkmanship. Another explanation could be national culture. Moriano et al. (2012) observed from their cross-cultural studies that subjective norms had more potent effects in collectivist cultures than individualistic ones.

However, the moderating effect of POS was negative and significant. This is consistent with the work of Warshaw (1980), who commented on the impact of managers and the pressure they can put on employees to comply. It would seem that in the Ghanaian work environment, complying with the wishes of managers takes precedence over the employees' desire to take action for improvement or innovation. Proactivity may be frowned upon, and employees normed into following laid-down instructions and procedures. This would suggest that managers are more interested in business as usual rather than allowing subordinates to rock the boat and the manager being held accountable for the employee's actions. Therefore, though intrapreneurs may comply with the wishes of their managers, the extent to which compliance conflicts with their intrapreneurial intention would seem to lower their perception of the extent to which they believe they receive support from their organization.

This would also seem to explain the negative moderating effect on attitude. Thus, the positive relationship between intrapreneurship intention and subjective norms revealed by the findings should be interpreted with great care. The intrapreneurship ideas may not necessarily have come from the bottom-up but rather top-down hence the positive relationship.

This research hypothesized a positive relationship between perceived behavioral control and intrapreneurial intention—the results from the analysis support this hypothesis. This means they see fewer impediments to their ability or desire to express intrapreneurship. This is particularly important in work situations when one's actions are not always under complete volitional control. The findings from this study corroborate similar results by Urban and Chantson (2019) about academic entrepreneurship in South Africa. There was a positive relationship between perceived behavioral control and entrepreneurial intention in the cross-cultural study by Moriano et al. (2012). The moderating relationship was, however, not significant. The implication could be that in the organizational context, the effect of POS does not affect the extent to which employees feel they have volitional control or access to resources. This finding can be related to investigations by Proenca (2014) and Crocker et al. (2017), who argued that it is not necessarily the resources employees are given but the extent to which employees perceive the self-interest motive of the organization. It is, therefore, possible that employees will question and disregard POS. Though employees have PBC, it may or may not be expressed to the extent that they experience genuine POS.

6. CONCLUSIONS

This study sought to understand the factors that influenced the intrapreneurial intention of employees within firms in Ghana. In doing so, six hypotheses were tested, and the findings were discussed. Attitude had a positive direct relationship with intrapreneurial intention. It cannot be over-emphasized that organizations need to attract and keep employees with the right intrapreneurial mindset to help champion growth and deliver competitive advantage (Augusto Felicio et al., 2012). However, organizations need to recognize that this attitude toward intrapreneurship needs to be actively supported through policies and initiatives that openly encourage and support individuals who demonstrate proactivity and initiative and take risks, even when some of these initiatives lead to some organizational costs. As this study has shown, having a positive attitude towards intrapreneurship is possible; however, it must have the right organizational conditions to flourish. Also, the managers need to be empowered so that the organization can continue to thrive through the efforts of these intrapreneurs.

A positive relationship implies that the employees are keen to behave in a way that important referents such as their manager approve. The danger here is that if the Ghanaian managers are only interested in maintaining the status quo, that will lead to frustration on the part of intrapreneurs leading to counterwork behaviors. However, with the right level of training on the part of managers, this motivation to respond positively to important referents can lead to the sweet spot where the employees can still create and innovate within the confines of the organization's rules and procedures. With perceived behavioral control, intrapreneurs feel they have what it takes to act intrapreneurially; however, the finding from this study indicates that they require genuine support from the organization. Even though they may desire to act out their intentions, they still require the use of organizational resources to turn their ideas into reality. Management needs to ensure that these are in place to motivate their intrapreneurs.

Managers' role in recognizing and encouraging intrapreneurship cannot be over-emphasized. They are the ones who will be the first point of call when employees have new ideas or suggestions for improvements or when they question the system. Managers need to be trained to quickly recognize these individuals and treat them differently from other employees. Thus, organizations in Ghana need to invest in the training and development of staff. It demonstrates the organization's commitment to its employees, can create a perception of support and encourages staff to reciprocate and feel free to share their ideas. Finally, Ghanaian organizations need to create opportunities to reward intrapreneurial employees; this will send undeniable signals about the vision of the culture that management is trying to engender. This research concludes that behavioral factors, as well as perceived organizational support, affect intrapreneurial intentions. It may, therefore, be the case that organizations are not unlocking the

creativity needed to win in the marketplace not because they do not want to but because they have not taken the behavioral dispositions of their staff into account and aligned their organizational processes and culture to take advantage of their employees unique and yet diverse characteristics.

REFERENCES

- Adachi, T., & Hisada, T. (2017). Gender differences in entrepreneurship and intrapreneurship: an empirical analysis. *Small Business Economics*, 48(3), 447-486.
- Ahmed, I., Nawaz, M.M., Ali, G. and Islam, T. (2015), "Perceived organizational support and its outcomes: A meta-analysis of latest available literature," *Management Research Review*, Vol. 38 No. 6, pp. 627-639.
- Ajzen, I. (1991). The theory of planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I. (2005). *Attitudes, personality, and Behavior*. London: McGraw-Hill Education.
- Ajzen, I. (2011). The theory of planned Behavior: *Reactions and reflections*. *Psychology & Health*, 26(9), 1113-1127.
- Ajzen, I. (2012). The theory of planned Behavior. In P. A. van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 1, pp. 438-459). Thousand Oaks: CA: SAGE.
- Ajzen, I. (2020). The theory of planned Behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314-324.
- Ajzen, I., Brown, T. C., & Carvajal, F. (2004). Explaining the discrepancy between intentions and actions: The case of hypothetical bias in contingent valuation. *Personality and social psychology bulletin*, 30(9), 1108-1121.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social Behavior*. Englewood Cliffs, N.J: Prentice-Hall.
- Ajzen, I., & Kruglanski, A. W. (2019). Reasoned action in the service of goal pursuit. *Psychological Review*, 126(5), 774-786. <https://doi.org/10.1037/rev0000155>
- Alam, M., Nasir, N. & Rehman, C. (2020). Intrapreneurship concepts for engineers: a systematic review of the literature on its theoretical foundations and agenda for future research. *Journal of Innovation and Entrepreneurship*, 9, 8 (2020).
- Alpkan, L., Bulut, C., Gunday, G., Ulusoy, G., & Kilic, K. (2010). Organizational support for intrapreneurship and its interaction with human capital to enhance innovative performance. *Management Decision*, 48(5), 732-755.
- Antoncic, B., & Hisrich, R. D. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing*, 16(5), 495-527.
- Antoncic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of Small Business and Enterprise Development*, 10(1), 7-24.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned Behavior: A meta-analytic review. *British Journal of Social Psychology*, 471-499.

- Augusto Felício, J., Rodrigues, R., and Caldeirinha, V. R. (2012). The effect of intrapreneurship on corporate performance. *Management. Decision.* 50, 1717–1738.
- Avanzi, L., Fraccaroli, F., Sarchielli, G., Ullrich, J. and Dick, R. (2014), “Staying or leaving: a combined social identity and social exchange approach to predicting employee turnover intentions,” *International Journal of Productivity and Performance Management*, Vol. 63 No. 3, pp. 272-289.
- Baran, B.E., Shanock, L.R. & Miller, L.R. (2012). Advancing Organizational Support Theory into the Twenty-First Century World of Work. *Journal of Business and Psychology* 27, 123–147
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *The Academy of Management Review*, 13(3), 442-453.
- Blanka, C. (2019). An individual-level perspective on intrapreneurship: a review and ways forward. *Review of Managerial Science*, 13(5), 1-43.
- Blau, P. M. (1964). Justice in social exchange. *Sociological Inquiry*, 34(2), 193-206.
- Boateng, F. D. (2014). Perceived organizational support and police officer effectiveness: Testing the organizational support theory in Ghana. *International Criminal Justice Review*, 24(2), 134-150.
- Carter, N. M., Gartner, W. B., Shaver, K. G., & Gatewood, E. J. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18(1), 13-39.
- Chen, Y., & Feeley, T. H. (2015). Predicting Binge Drinking in College Students: Rational Beliefs, Stress, or Loneliness? *Journal of Drug Education*, 45(3–4), 133-155.
- Chen, Z., Eisenberger, R., Johnson, K. M., Sucharski, I. L., & Aselage, J. (2009). Perceived organizational support and extra-role performance: which leads to which?. *The Journal of Social Psychology*, 149(1), 119-124.
- Cheung, M.F.Y. (2013), “The mediating role of perceived organizational support in the effects of interpersonal and informational justice on organizational citizenship behavior,” *Leadership and Organization Development Journal*, Vol. 34 No. 6.
- Chouchane, R.; Fernet, C.; Austin, S.; Zouaoui, S.K. Organizational support and intrapreneurial Behavior: On the role of employees’ intrapreneurial intention and self-efficacy. *Journal of. Management and Organization*. 2021, 1–17.
- Christensen, K. S. (2005). Enabling intrapreneurship: the case of a knowledge-intensive industrial company. *European Journal of Innovation Management*, 8(3), 203-322.
- Contin, I., Larraza, M., & Mas, I. (2007). Distinctive characteristics of entrepreneurs and established entrepreneurs: evidence from REM Navarra data. *Business Magazine* (20), 10-19.
- Cooke, R., & French, D. (2008). How well do the theory of reasoned action and theory of planned Behavior predict intentions and attendance at screening programmes? A meta-analysis. *Psychology and Health*, 23(7), 745-765.
- Corbett, A. (2018). The myth of the intrapreneur. *Harvard Business Review*, 26(06), 2018.
- Crocker, J., Canevello, A., & Brown, A. A. (2017). Social Motivation: Costs and Benefits of Selfishness and Otherishness. *Annual Review of Psychology*, 68, 299-325.
- De Jong, J. P., Parker, S. K., Wennekers, S., & Wu, C. (2011). Corporate entrepreneurship at the individual level: measurement and determinants. *EIM research reports*. Zoetermeer, 11(13), 1-27.

- Doane, A. N., Pearson, M. R., & Kelley, M. L. (2014). Predictors of cyberbullying perpetration among college students: An application of the theory of reasoned action. *Computers in Human Behavior*, 36(C), 154-162.
- Douglas, J. M., & Fitzsimmons, J. R. (2013). Intrapreneurial intentions versus entrepreneurial intentions: distinct constructs with different antecedents. *Small Business Economics*, 41(1), 115-132.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75(1), 51-59.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1), 42-51.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500-507.
- Elert, N., Stam, E., and Stenkula, M. (2019). *Intrapreneurship and Trust. Working Paper Series No. 1280*. Stockholm: Research Institute of Industrial Economics.
- Farrukh, M., Chong, W.Y., Mansori, S. and Ravan Ramzani, S. (2017). Intrapreneurial Behavior: the role of organizational commitment. *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 13 No. 3, pp. 243-256.
- Farrukh, M., Khan, M. S., Raza, A., & Shahzad, I. A. (2021). Influence of high-performance work systems on intrapreneurial Behavior. *Journal of Science and Technology Policy Management*, 12(4), 609-626.
- Fitzsimmons, J. R., & Douglas, E. J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions. *Journal of Business Venturing*, 26(4), 431-440.
- Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2019). Measuring intrapreneurship at the individual level: Development and validation of the Employee Intrapreneurship Scale (EIS). *European Management Journal*, 37(6), 806-817.
- George, J. M., & Brief, A. P. (1992). Feeling good-doing good: a conceptual analysis of the mood at work-organizational spontaneity relationship. *Psychological Bulletin*, 112(2), 310-329.
- González-Serrano, M. H., González García, R. Y., & Pérez Campos, C. (2018). Entrepreneurial and intrapreneurial intentions of sports science students: what are their determinant variables? *Journal of Physical Education and Sport*, 18(3), 1363-1372.
- Gopi, M., & Ramayah, T. (2007). Applicability of theory of planned Behavior in predicting intention to trade online: Some evidence from a developing country. *International Journal of Emerging Markets*, 2(4), 348-360.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review* (25), 161-178.
- Guven, B. The integration of strategic management and intrapreneurship: Strategic intrapreneurship from theory to practice. *Business & Economics Research Journal*, 2020, 11, 229–245
- Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). Thousand Oaks, CA: Sage.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd Ed., Sage: Thousand Oaks.

- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), “A new criterion for assessing discriminant validity in variance-based structural equation modeling,” *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Hirschey, R., Bryant, A. L., Macek, C., Battaglini, C., Santacroce, S., Courneya, K. S., Sheeran, P. (2020). Predicting physical activity among cancer survivors: Meta-analytic path modeling of longitudinal studies. *Health Psychology*, 39(4), 269–280.
- Hornsby, J., Kuratko, D., & Zahra, S. (2002). Middle manager’s perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of Business Venturing*, 17(3), 253-273.
- Huang L-Y, Yang Lin S-M and Hsieh Y-J (2021) Cultivation of Intrapreneurship: A Framework and Challenges. *Frontiers in Psychology*, 12, 731990.
- Jeong, I., Pae, J. H., & Zhou, D. (2006). Antecedents and consequences of the strategic orientations in new product development: the case of Chinese manufacturers. *Industrial Marketing Management*, 35(3), 348-358.
- Kautonen, T., van Gerderen, M., & Fink, M. (2015). Robustness of the theory of planned Behavior in predicting entrepreneurial intentions and actions. *Entrepreneurship: Theory and Practice*, 39(3), 655-674.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.
- Kumar, S. and Parveen, R. (2021), “Assessing the factors of employees’ intrapreneurial behavior: an Indian context”, *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 17 No. 4, pp. 804-821.
- Kuratko, D. F. (2017). Corporate entrepreneurship 2.0: research development and future directions. *Foundations and Trends® in Entrepreneurship*, 13(6), 441-490.
- Kuratko, D. F., & Audretsch, D. B. (2013). Clarifying the domains of corporate entrepreneurship. *International Entrepreneurship and Management Journal*, 9(3), 323-335.
- Kurtessis, J.N., Eisenberger, R., Ford, M.T., Buffardi, L.C., Stewart, K.A. and Adis, C.S. (2017). Perceived organizational support: a meta-analytic evaluation of organizational support theory. *Journal of Management*, Vol. 43 No. 6, pp. 1854-1884.
- Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship theory and practice*, 33(3), 593-617.
- Lortie, J., & Castogiovanni, G. (2015). The theory of planned Behavior in entrepreneurship research: what we know and future directions. *International Entrepreneurship and Management Journal*, 11(4), 935-957.
- Maresch, D., Harms, R., Norbert., K. N., & Wimmer-Wurm, B. (2016). The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business studies university programs. *Technological Forecasting and Social Change*, 104(C), 172-179.
- Marler, J. H., Fisher, S. L., & Ke, W. (2009). Employee self-service technology acceptance: A comparison of pre-implementation and post-implementation relationships. *Personnel Psychology*, 62(2), 327-358.

- Martiarena, A. (2013). What's so entrepreneurial about intrapreneurs? *Small Business Economics*, 40(1), 27-39.
- Monsen, M. H., Patzelt, H., & Saxton, T. (2010). Beyond simple utility: Incentive design and trade-offs for corporate employee-entrepreneurs. *Entrepreneurship: Theory and Practice*, 34(1), 105-130.
- Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of Career Development*, 39(2), 162-185.
- Munir, H., Jianfeng, C., & Ramzan, S. (2019). Personality traits and theory of planned behavior comparison of entrepreneurial intentions between an emerging economy and a developing country. *International Journal of Entrepreneurial Behavior & Research*.
- Mustafa, M., Gavin, F., & Hughes, M. (2018). Contextual determinants of employee entrepreneurial behavior in support of corporate entrepreneurship: a systematic review and research agenda. *Journal of Enterprising Culture*, 26(3), 285-326.
- Neessen, P. C., Caniels, M. C., Vos, B., & De Jong, J. P. (2019). The intrapreneurial employee: toward an integrated model of intrapreneurship and research agenda. *International Entrepreneurship and Management Journal*, 15(2), 545-571.
- Oteuliev, A. (2015). Intrapreneurship: Recommendations on introducing this mechanism in large companies of Uzbekistan. *Perspectives of Innovations, Economics and Business*, PIEB, 15(1), 31-40.
- Pahang, J. T., Nasirun, N., M. Nor, K. N., Anuar, H. H., & Saputra, D. H. (2021). Examining Factors that Influence Harumanis Farmers' Intention to Use Safe Pesticides. *Global Business Management Review*, 13(1), 79-96.
- Pandey, J., Gupta, M. and Hassan, Y. (2021), intrapreneurship to engage employees: role of psychological capital. *Management Decision*, Vol. 59 No. 6, pp. 1525-1545. <https://doi.org/10.1108/MD-06-2019-0825>
- Parker, S. C. (2011). Intrapreneurship or entrepreneurship. *Journal of Business Venturing*, 26(1), 19-34.
- Paul, E.K. and Phua, S.K. (2011). Lecturers' job satisfaction in a public tertiary institution in Singapore: ambivalent and non-ambivalent relationship between job satisfaction and demographical variables. *Journal of Higher Education Policy and Management*, Vol. 33 No. 2, pp. 141-151.
- Pinchot, G. (1985). *Intrapreneuring: why you don't have to leave the corporation to become an entrepreneur*. New York: Harper & Row.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.
- Proenca, J. (2014). Perceived organizational support as a moderator of empowerment practices. *Academy of Business Research Journal*, 1, 139-153.
- Reibenspiess, V.; Drechsler, K.; Eckhardt, A.; Wagner, H.-T (2020). Tapping into the wealth of employees' ideas: Design principles for a digital intrapreneurship platform. *Information & Management*, 103287.
- Reuther, K., Borodzicz, E. P., & Schumann, C. A. (2018). Identifying barriers to intrapreneurship. In 2018 *IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC)* (pp. 1-9). IEEE.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: a review of the literature. *Journal of Applied Psychology*, 87(4), 698-714.

- Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: the contribution of perceived organizational support. *Journal of Applied Psychology*, 825-836.
- Riebl, S. K., Estabrooks, P. A., Dunsmore, J. C., Savla, J., Frisard, M. I., Dietrich, A. M., ... Davy, B. M. (2015). A systematic literature review and meta-analysis: The theory of planned Behavior's application to understand and predict nutrition-related behaviors in youth. *Eating Behaviors*, 18, 160–178.
- Riggle, R.J., Edmondson, D.R. and Hansen, J.D. (2009), "A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research", *Journal of Business Research*, Vol. 62 No. 10, pp. 1027-1030.
- Rigtering, J. P., & Weitzel, U. (2002). Work context and employee behavior as antecedents for intrapreneurship. *International Entrepreneurship and Management Journal*, 9(3), 337-360.
- Ringle, C. M., Wende, S., and Becker, J.-M. (2022). "SmartPLS 4." Oststeinbek: SmartPLS GmbH, <http://www.smartpls.com>.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2(2), 121-139.
- Sahli, AB, Legohérel, P (2015) The tourism web acceptance model: a study of intention to book tourism products online. *Journal of Vacation Marketing* 22(2): 179–194.
- Shaver, K. G., Gartner, W. B., Crosby, E., Bakalarova, K., & Gatewood, E. J. (2001). Attributions about entrepreneurship: A framework and process for analyzing reasons for starting a business. *Entrepreneurship Theory and Practice*, 26(2), 5-28.
- Sheeran, P. (2002). Intention—behavior relations: A conceptual and empirical review. *European Review of Social Psychology*, 12(1), 1-36.
- Shukla, A., & Rai, H. (2015). Linking perceived organizational support to organizational trust and commitment: Moderating role of psychological capital. *Global Business Review*, 16(6), 981-996.
- Sieger, P., & Monsen, E. (2015). Founder, academic, or employee? A nuanced study of career choice intentions. *Journal of Small Business Management*, 53, 30-57.
- Skarmas, D., Lisboa, A., and Saridakis, C. (2016). Export performance as a function of market learning capabilities and intrapreneurship: SEM and FsQCA findings. *Journal of Business Research*, 69, 5342–5347.
- Tisu, L., Pap, Z., & Virga, D. (2021). Employee Intrapreneurship Scale: adaptation and validation in the Romanian working population. *Psihologia Resurselor Umane*, 19(2).
- Todd, J., & Mullan, B. (2011). Using the theory of planned behavior and prototype willingness model to target binge drinking in female undergraduate university students. *Addictive Behaviors*, 36, 980-986.
- Urban, B., & Chantson, J. J. T. J. (2019). Academic entrepreneurship in South Africa: testing for entrepreneurial intentions. *The Journal of Technology Transfer*, 44(3), 948-980.
- Urbano, D., & Turró, A. (2013). Conditioning factors for corporate entrepreneurship: an in (ex) ternal approach. *International Entrepreneurship and Management Journal*, 9(3), 379-396.
- Vamvaka, V., Stoforos, C., Palaskas, T., & Botsari, C. (2020). Attitude toward entrepreneurship perceived behavioral control, and entrepreneurial intention: dimensionality, structural relationships, and gender differences. *Journal of Innovation and Entrepreneurship*, 9(5).

- Wang, M., Cai, J., & Munir, H. (2021). Promoting entrepreneurial intentions for academic scientists: combining the social cognition theory and theory of planned Behavior in broadly-defined academic entrepreneurship. *European Journal of Innovation Management*.
- Warshaw, P. R. (1980). A new model for predicting behavioral intentions: An alternative to Fishbein. *Journal of Marketing Research*, 17(2), 152-172.
- Wombacher, J. and Felfe, J. (2017). The interplay of team and organizational commitment in motivating employees' interteam conflict handling. *Academy of Management Journal*, Vol. 60 No. 4, p. 1554.
- Wong, Y. T., Wong, C. S., & Ngo, H. Y. (2012). The effects of trust in an organization and perceived organizational support on organizational citizenship behavior: A test of three competing models. *The International Journal of Human Resource Management*, 23(2), 278-293.
- Zampetakis, L. A., Kafetsios, K., Bouranta, N., & Moustakis, V. S. (2009). On the relationship between emotional intelligence and entrepreneurial attitudes and intentions. *International Journal of Entrepreneurial Behavior & Research*, 15(6), 595-618.
- Zheng, D., Wu, H., Eisenberger, R., Shore, L. M., Tetrick, L. E., & Buffardi, L. C. (2016). Newcomer leader-member exchange: the contribution of anticipated organizational support. *Journal of Occupational and Organizational Psychology*, 4(89), 834-855.

The Author

Dr. Princewill Osaro Omorogiuwa

**Junior Researcher, Swiss Business School,
Flughafenstrasse 3, 8302 Kloten-Zurich,
Switzerland**

Professor of Practice, Hult International Business School, London Campus

35 Commercial Road, London, E1 1LD, United Kingdom

Revisiting of Job Demands-Resources Theory in Malaysia

Dalowar Hossan

Ph.D. Candidate, School of Business and Economics

University Putra Malaysia, Selangor, Malaysia

Zuraina Dato' Mansor

Associate Professor, School of Business and Economics

University Putra Malaysia, Selangor, Malaysia

Nor Siah Jaharuddin

Senior Lecturer, School of Business and Economics

University Putra Malaysia, Selangor, Malaysia

Abstract

This study revisits the Job Demands-Resources (JD-R) theory based on the Malaysian context with the attachment of workaholism as a personal demand. A total of 199 respondents' data was collected by online self-administered questionnaire longitudinally (T1 and T2, with a six-month lag) and largely cross-sectionally (questionnaires for job crafting and self-undermining were attached in T2 only). Path-coefficient analysis through PLS-SEM was performed to test the hypotheses. The findings reveal that the JD-R theory is equally valid for Malaysian employees to increase their work engagement, as in the literature for Western cultures. Future studies can be conducted based on a multi-country and longitudinal basis.

Keywords: JD-R theory, Job Demands, Personal Demands, Job Resources, Personal Resources, Work Engagement.

1. INTRODUCTION

Job Demands-Resources (JD-R) theory describes how job demands and job resources interact to affect employee engagement, motivation, and well-being in the workplace. The theory was developed by Arnold Bakker and Evangelia Demerouti in the late 1990s and has since become a popular framework for understanding workplace stress and employee well-being. The JD-R Theory defines job demands as those elements of work that identify as the physical or mental effort that, if they surpass a person's capacity to cope, can result in anxiety, exhaustion, and poor health effects. Examples of job demands are workload, constrained time, mental needs, and role ambiguity. Contrarily, job resources are elements of the workplace that assist staff in achieving work objectives and lessen workload pressures to enhance well-being. Examples of job resources include feedback, social support, personal development and growth opportunities, and autonomy.

There is a continuing need for collaboration, both from a practical and academic perspective, to investigate whether organizational behavior theories studied with Western samples are valid for non-Western samples (Leung, 2009; Gelfand et al., 2008). Spector et al. (2007) stated that workplace conflict influences employees in Asian countries more than in Western countries because of cultural values and social belonging. The social support and facilities in the workplace and how Asian workers perceive them as "resources" may be affected by this issue. Other scholars, for example, Sun & Pan (2008) and Clarke et al. (2004), have pointed out that Chinese firms exacerbate the "Western-style" employment problem, especially the need to retain talented employees and raise the

emotional attachment of the employees to the firm. Therefore, it is important to determine how the JD-R theory developed based on studies of Western employees' cultures applies to non-Western employees, specifically those working in Asian countries, such as Malaysia, where social attitudes are significant in the workplace. This study revisits the Job Demands-Resources (JD-R) theory based on the Malaysian context with the attachment of work-aholism as a personal demand.

2. LITERATURE REVIEW

Drivers of work engagement in Malaysia

Business Today (2021) reported that 61% of employees were looking for a new job within 12 months in Malaysia, which is a higher rate than in Western countries such as Australia (48%), New Zealand (50%), and the United Kingdom (55%). Lack of career development (36%), recognition/appreciation deficiency (27%), and shortage of training opportunities (26%) are the main reasons for leaving a job in Malaysia. Lack of appropriate salary scale, management suffering, overtime work, and lack of flexibility are also responsible for it. Thompson (2021) detailed that 81% of Generation Z (aged 18-24) and 68% of Millennials (aged 25-34) planned to change their jobs within one year.

Choo (2020) identified the top drivers of engagement in Malaysia (in order of importance with % favorability associated)

- Recognition for good work (62%)
- There is a clear link between the work and the company's strategic objectives (62%)
- Opportunities for learning and development (67%)
- Manager helps in career development (59%)
- Confidence in senior leadership to make the right decisions for the company (62%)

Based on the Maybank Sustainability Report (2015), Maybank focused on learning and development, employee engagement, diverse and inclusive workplace, talent and leadership, health and well-being, and safety for forming a long-term value known as the 20/20 sustainability plan. At the end of the 20/20 plan, Maybank delivered some impact-based programs (such as diversity and inclusion- a workplace where all the employees/members get equal treatment, respect, and equality, employee safety, health and well-being, working environment, emphasizing sustainability, recruitment, growth and participation of talent) to support the development of M25 based on the Maybank Sustainability Report (2020).

According to DRB-HICOM (2019), the work engagement strategies of DRB-HICOM are based on the five pillars to ensure an inclusive, unique, and compelling place to work and grow for all. The following pillars demonstrate the values and commitment to creating a strong brand for the employees and future talents.

- 1) DRB-HICOM marque (The acknowledgment of awards for outstanding contributions or achievements in line with DRB-HICOM's mission and vision)
- 2) DRB-HICOM nurtures (A scaled list of development programs that offers employees to enhance their competencies and create a learning culture organization)
- 3) DRB-HICOM excellence (To provide special facilities that help employees maintain a work-life balance and provide accessibility with quality)

- 4) DRB-HICOM rewards (An extent of perks and rewards which DRB-HICOM offers to employees and help to create a winning culture)
- 5) DRB-HICOM dynamic (Variety of care programs to ensure employees have access to the resources needed to care for their health and family).

Sime Darby Berhad Annual Report (2021) claimed that employee engagement increased by 4 percentage points in 2021 compared to 2020 because of the Sime Darby strategy of FY2020. The focal points of FY2020 were infrastructure, career development, and safety, while, in order to increase employee engagement in FY2022, Sime Darby highlighted company meetings, career growth, and knowledge expectations, creating a climate at work that is more inclusive, protecting employees' well-being, and ensuring that the infrastructure is in place to assist employees both physically and psychologically according to Sime Darby Berhad Annual Report (2021).

Job Demands-Resources (JD-R) Theory

Employee engagement (vigor, dedication, and absorption, also known as positive fulfillment of mind in services) results from the interaction among job demands, job resources, and personal resources, according to the JD-R theory. Job demands can be physical, psychological, or social aspects of the job that require sustained effort and that can be associated with stress and burnout. Examples of job demands include workload, time pressure, and emotional demands. Job resources are aspects of the job that can facilitate employee well-being and performance. Examples of job resources include social support, feedback, autonomy, and opportunities for learning and development. Personal resources are individual characteristics that can facilitate employee well-being and performance, such as self-efficacy, optimism, and resilience. The JD-R theory of engagement proposes that job resources and personal resources can buffer the negative effects of job demands and foster employee engagement. Specifically, job resources can enhance employee motivation and job satisfaction, while personal resources can enhance employee self-efficacy and resilience. Overall, the JD-R theory proposes working setting that delivers adequate job resources and foster personal resources that are responsible for higher employee engagement. As a result, employee well-being, performance, and organizational outcomes may improve.

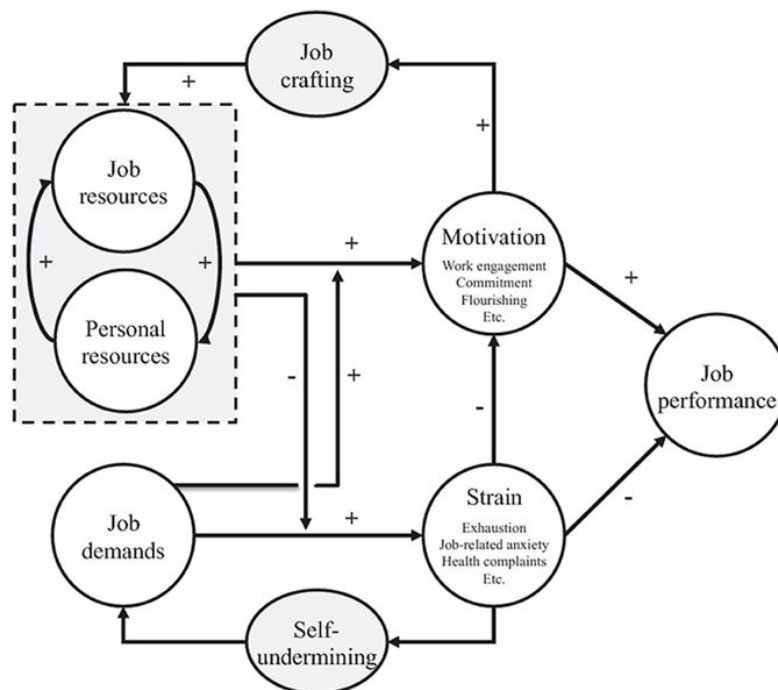


Figure 1: JD-R theory (Bakker and Demerouti, 2017, p. 275)

The Integration of Personal Demands

Van den Broeck et al. (2013) indicated that specifics about one’s personal demands might be seen as adding to the workload for employees and investigated these influences on work engagement, for which the JD-R theory may be a useful framework. The current study is distinctive because it takes into account personal demands in addition to available resources. Prieto et al. (2008, p. 359) assert that it may also be useful to consider individual needs, stating that “...personality traits like perfectionism and emotional instability, and goal setting and levels of expectations, could be relevant personal demands to be studied in future research on this intriguing topic.” Guglielmi et al. (2012) viewed workaholism as a personal demand. According to a study by Schaufeli et al. (2009), workaholism is a personal risk factor for burnout and well-being, regardless of occupational context. Although often used, workaholism does not go beyond the accepted definition of its core characteristic: a keen interest in work. Researchers adopt the definition of Schaufeli et al. (2008) to explain workaholism in this research. Workaholism, manifested as compulsive work, is essentially a tendency to overwork (behavioral dimension) and obsessively work (cognitive dimension). A review of academic definitions reveals two key characteristics of workaholism that are consistent with this definition: “works very hard” and “is driven by a strong inner desire” (McMillan & O’Driscoll, 2006, p. 102).

Guglielmi et al. (2012) specified the importance of workaholism (one kind of personal demand) to JD-R theory to the rise of burnout among school administrators. Workaholism can lead to burnout because overwork can deplete a person’s emotional resources, leading to emotional exhaustion, known as burnout (Maslach, 1986). This is consistent with previous findings (for example, Taris et al., 2005).

Table 1: Hypothesis development

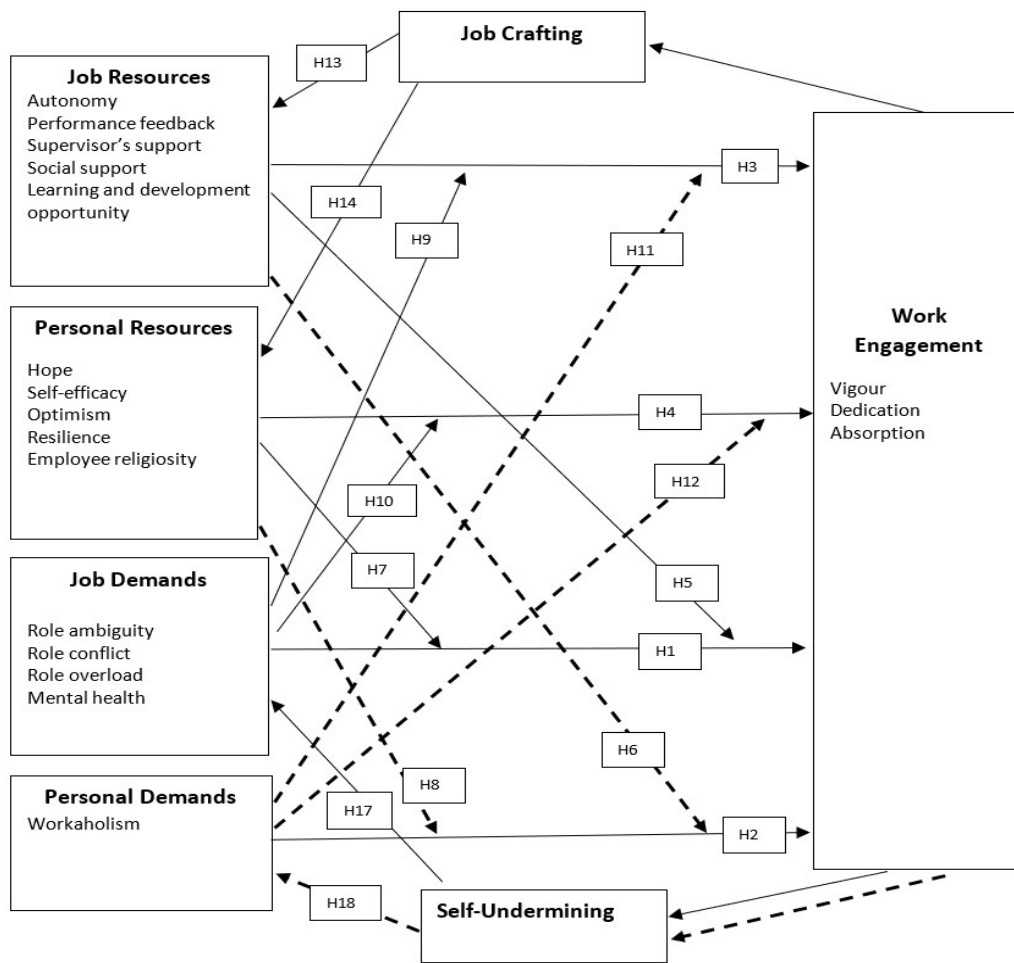
| Proposition | Specification and Hypothesis |
|---|---|
| Proposition 1: | Job demands define psychological, physical, social, and organizational components of a job that necessitate sustained mental, physical, and cognitive effort and are connected with physical and emotional costs. |
| Job and personal characteristics are four types; job demands, job resources, personal resources and personal demands | Job demands refer to the psychological, physical, social, and organizational components that have the potential incentive for effectively attaining work goals, regulating the effect of job demands, and stimulating personal development and learning. |
| | Personal demands are described as the standards that people set for their own actions and performance, which motivates them to work harder and has physical and psychological consequences. |
| | Personal resources are valued, actual, social, psychological, or symbolic possessions that could be utilized to improve performance in specific aspects. |

| Proposition | Specification and Hypothesis |
|--|---|
| <p>Proposition 2: Demands (job and personal) and resources (job and personal) invite two procedures.</p> | <p>Process of health impairment: the demands of job and personal obligations cause employees to exert more effort, which depletes their psychological, physical, and cognitive resources and has a negative impact on their level of work engagement.</p> <p><i>H1₀: Job demands do not have a significant negative influence on work engagement.</i></p> <p><i>H1_a: Job demands have a significant negative influence on work engagement.</i></p> <p><i>H2₀: Personal demands do not have a significant negative influence on work engagement.</i></p> <p><i>H2_a: Personal demands have a significant negative influence on work engagement.</i></p> <p>Process of motivation: the job and personal resources meet the fundamental psychological requirements and encourage workplace involvement.</p> <p><i>H3₀: There is no significant positive influence of job resources on work engagement.</i></p> <p><i>H3_a: There is a significant positive influence of job resources on work engagement.</i></p> <p><i>H4₀: There is no significant positive influence of personal resources on work engagement.</i></p> <p><i>H4_a: There is a significant positive influence of personal resources on work engagement.</i></p> |
| <p>Proposition 3: Demands (job and personal) and resources (job and personal) have a multiplicative effect on work engagement.</p> | <p>The effect of job and personal demands on engagement at work is lessened by job resources.</p> <p><i>H5₀: Job resources do not moderate the relationship between job demands and work engagement.</i></p> <p><i>H5_a: Job resources moderate the relationship between job demands and work engagement.</i></p> <p><i>H6₀: Job resources do not moderate the relationship between personal demands and work engagement.</i></p> <p><i>H6_a: Job resources moderate the relationship between personal demands and work engagement.</i></p> <p>Personal resources weaken the effect of job and personal demands on work engagement.</p> <p><i>H7₀: There is no moderating effect of personal resources on the relationship between job demands and work engagement.</i></p> <p><i>H7_a: There is a moderating effect of personal resources on the relationship between job demands and work engagement.</i></p> <p><i>H8₀: There is no moderating effect of personal resources on the relationship between personal demands and work engagement.</i></p> |

| Proposition | Specification and Hypothesis |
|--|--|
| <p>Proposition 3: Demands (job and personal) and resources (job and personal) have a multiplicative effect on work engagement.</p> | <p><i>H8a: There is a moderating effect of personal resources on the relationship between personal demands and work engagement.</i></p> <p>Job demands decline the effect of personal and job resources on work engagement.</p> <p><i>H9o: There is no moderating effect of job demands on the relationship between job resources and work engagement.</i></p> <p><i>H9a: There is a moderating effect of job demands on the relationship between job resources and work engagement.</i></p> <p><i>H10o: There is no moderating effect of job demands on the relationship between personal resources and work engagement.</i></p> <p><i>H10a: There is a moderating effect of job demands on the relationship between personal resources and work engagement.</i></p> <p>Personal demands decrease the influence of job and personal resources on work engagement.</p> <p><i>H11o: There is no moderating effect of personal demands on the relationship between job resources and work engagement.</i></p> <p><i>H11a: There is a moderating effect of personal demands on the relationship between job resources and work engagement.</i></p> <p><i>H12o: There is no moderating effect of personal demands on the relationship between personal resources and work engagement.</i></p> <p><i>H12a: There is a moderating effect of personal demands on the relationship between personal resources and work engagement.</i></p> |
| <p>Proposition 4: Job crafting</p> | <p>Job crafting is the act of employees taking the initiative to alter the demands and resources of their jobs in order to better match the job's design with their own skills and preferences. Job crafting is anticipated to boost job and personal resources to promote engagement at work.</p> <p><i>H13o: Job crafting does not positively influence the job resources.</i></p> <p><i>H13a: Job crafting positively influences the job resources.</i></p> <p><i>H14o: Job crafting does not positively influence the personal resources.</i></p> <p><i>H14a: Job crafting positively influences the personal resources.</i></p> <p><i>H15o: There is no mediating effect of job resources on the relationship between job-crafting and work engagement.</i></p> <p><i>H15a: There is a mediating effect of job resources on the relationship between job-crafting and work engagement.</i></p> <p><i>H16o: There is no mediating effect of personal resources on the relationship between job-crafting and work engagement.</i></p> <p><i>H16a: There is a mediating effect of personal resources on the relationship between job-crafting and work engagement.</i></p> |

| Proposition | Specification and Hypothesis |
|---|--|
| <p>Proposition 5: Job self-undermining</p> | <p>Employees who self-undermine themselves engage in dysfunctional behaviors that obstruct performance and may even lead to conflict (such as poor communication or aggressive behavior). It is anticipated that self-undermining would make it harder to balance job and personal demands and cause stress.</p> <p><i>H17₀: Self-undermining does not positively influence job demands.</i></p> <p><i>H17_a: Self-undermining positively influences job demands.</i></p> <p><i>H18₀: Self-undermining does not positively influence personal demands.</i></p> <p><i>H18_a: Self-undermining positively influences personal demands.</i></p> <p><i>H19₀: Job demands do not mediate the relationship between self-undermining and work engagement.</i></p> <p><i>H19_a: Job demands mediate the relationship between self-undermining and work engagement.</i></p> <p><i>H20₀: Personal demands do not mediate the relationship between self-undermining and work engagement.</i></p> <p><i>H20_a: Personal demands mediate the relationship between self-undermining and work engagement.</i></p> |
| <p>Proposition 6: Reciprocal relationship</p> | <p><i>H21₀: Job crafting does not mediate the reciprocal relationship between job resources and work engagement.</i></p> <p><i>H21_a: Job crafting mediates the reciprocal relationship between job resources and work engagement.</i></p> <p><i>H22₀: Job crafting does not mediate the reciprocal relationship between personal resources and work engagement.</i></p> <p><i>H22_a: Job crafting mediates the reciprocal relationship between personal resources and work engagement.</i></p> <p><i>H23₀: Self-undermining does not mediate the reciprocal relationship between job demands and work engagement.</i></p> <p><i>H23_a: Self-undermining mediates the reciprocal relationship between job demands and work engagement.</i></p> <p><i>H24₀: Self-undermining does not mediate the reciprocal relationship between personal demands and work engagement.</i></p> <p><i>H24_a: Self-undermining mediates the reciprocal relationship between personal demands and work engagement.</i></p> |

Note: All the hypotheses will be tested at the 5% statistical significance level.



Note: Solid lines denote already established and tested relationships while the dashed lines signify newly less frequently tested relationships.

Figure 2: Research framework

3. METHODOLOGY AND RESULTS

Participants and Procedure

Longitudinal data was gathered in two waves from the employees in thirty Malaysian organizations that participated in this study. Respondents came from non-government as well as health, education, finance, and banking organizations. The size of the organizations ranged from 50 to 4000 employees. Questionnaires were distributed via mail. All participants received the same instructions for filling out the questionnaire, and the researcher obtained ethical approval from the “Ethics Committee for Research Involving Human Subjects (JKEUPM)” prior to data collection. To test the core processes of JD-R theory (strain and motivation process) with demands (job and personal) and resources (job and personal) as well as examine the job crafting and self-undermining, this study was directed both cross-sectionally and longitudinally to test the hypotheses over time as well as compare the findings with literature (largely cross-sectional).

Time 1 (T1) surveys were conducted in January 2023 with approximately 2437 respondents in Malaysia. A total of 473 (19.41% of the overall response rate) usable questionnaires were returned at T1. The questionnaire for T1 was related to the construct of job resources, personal resources, job demands, personal demands, and work engagement. The questionnaire was administered for the second Time 2 (T2) in July 2023 (6-month time lag). The questionnaire for T2 was related to the construct of employee work engagement, job crafting, self-undermining, job demands, job resources, personal demands, and personal resources.

In comparison to the first survey for the first questionnaire, fewer people responded to the second survey for the second questionnaire. The questionnaire was distributed to the respondents of T1, and the questionnaire distribution process was similar to T1. A total of 199 (42.07% of the response rate from the respondents of T1) usable questionnaires were accepted at T2.

Table 2: Demographic Characteristics

| Variable | % (n) |
|---------------------|------------------------------|
| Gender | Female: 70.85% (141) |
| | Male: 29.15% (58) |
| Age | Range: 18-63 years |
| | Median: 34 years |
| | Standard deviation: 7 |
| Marital status | Married: 57.29% (114) |
| | Divorce/ single: 42.71% (85) |
| Work hours per week | Range: 7-103 hours |
| | Median: 39 |
| | Standard deviation: 6 |
| Education | PhD: 10.55% (21) |
| | Master: 16.58% (33) |
| | Bachelor: 39.20% (78) |
| | Diploma: 33.67% (67) |

Measures

The researchers used the five-point Likert scale questions to collect data by including 1 for strongly disagreed to, 5 for strongly agreed, and an option that respondents can choose if they did not want to respond. The questionnaire of nine items measured employee work engagement (adapted from Schaufeli et al., 2006), and the questionnaire of job demands (conflict of roles, ambiguity about roles, role overload, mental health) had a total of 17 items, adapted from Rizzo et al. (1970), Seashore et al. (1982), WHO-5-Well-Being Questionnaire (Topp et al., 2015) were utilized in this research. The twenty-item measure (adapted from Rothmann et al., 2006; Tones & Pillay, 2008) of job resources (social support, autonomy, learning and development opportunities, supervisor's support, performance feedback), nineteen item measure (adapted from Luthans et al., 2007; Plante & Boccaccini, 1997) of personal resources (hope, self-efficacy, optimism, resilience, employee religiosity), seven items of the Bergen work addiction scale (adapted from Andreassen et al., 2012) as a measure of personal demand (workaholism), the ten-item version of job crafting (adapted from Bakker et al., 2018) and six-item version of self-undermining (adapted from Bakker & Wang, 2020) were included as measures in this research.

Data Analysis

The T1 and T2 samples were tested for distinctiveness by assessing the path coefficient using Partial Least Squares Structural Equation Modelling (PLS-SEM). This study was conducted to test the hypotheses H1a-H12a and H13a-H24a based on the collected data of T1 and T2, respectively. The null hypotheses (H10 - H240) were rejected, and the alternative hypotheses (H1a-H24a) were supported, as indicated by the results presented in Table 3.

Table 3: Path-coefficient results

| Hypothesis (T1) | Original sample | Sample mean | SD | t-value | p-value |
|--|------------------------|--------------------|-----------|----------------|----------------|
| H1 _a : Job demands have significant negative effect on work engagement | -0.382 | -0.386 | 0.057 | 6.738 | 0.000 |
| H2 _a : Personal demands have significant negative effect on work engagement | -0.235 | -0.220 | 0.062 | 3.777 | 0.000 |
| H3 _a : There is significant positive influence of job resources on work engagement | 0.082 | 0.083 | 0.039 | 2.124 | 0.034 |
| H4 _a : There is significant positive influence of personal resources on work engagement | 0.194 | 0.197 | 0.044 | 4.459 | 0.000 |
| H5 _a : Job resources moderate the relationship between job demands and work engagement | -0.142 | -0.130 | 0.060 | 2.365 | 0.018 |
| H6 _a : Job resources moderate the relationship between personal demands and work engagement | -0.124 | -0.128 | 0.053 | 2.353 | 0.019 |
| H7 _a : There is moderating effect of personal resources on the relationship between job demands and work engagement | -0.348 | -0.356 | 0.069 | 5.051 | 0.000 |
| H8 _a : There is moderating effect of personal resources on the relationship between personal demands and work engagement | -0.216 | -0.219 | 0.055 | 3.912 | 0.00 |
| H9 _a : There is moderating effect of job demands on the relationship between job resources and work engagement | 0.104 | 0.115 | 0.053 | 1.968 | 0.050 |
| H10 _a : There is moderating effect of job demands on the relationship between personal resources and work engagement | 0.138 | 0.136 | 0.053 | 2.623 | 0.009 |
| H11 _a : There is moderating effect of personal demands on the relationship between job resources and work engagement | -0.256 | -0.253 | 0.078 | 3.269 | 0.001 |
| H12 _a : There is moderating effect of personal demands on the relationship between personal resources and work engagement | -0.037 | -0.036 | 0.017 | 2.114 | 0.035 |

| Hypothesis (T2) | Original sample | Sample mean | SD | t-value | p-value |
|---|-----------------|-------------|-------|---------|---------|
| H13 _a : Job crafting positively influences the job resources | 0.509 | 0.510 | 0.079 | 6.451 | 0.000 |
| H14 _a : Job crafting positively influences the personal resources | 0.540 | 0.542 | 0.058 | 9.318 | 0.000 |
| H15 _a : Job resources mediate the relationship between job crafting and work engagement | 0.114 | 0.117 | 0.035 | 3.226 | 0.001 |
| H16 _a : Personal resources mediate the relationship between job crafting and work engagement | 0.044 | 0.043 | 0.021 | 2.094 | 0.036 |
| H17 _a : Self-undermining positively influences the job demands | 0.031 | 0.032 | 0.017 | 1.974 | 0.048 |
| H18 _a : Self-undermining positively influences the personal demands | 0.207 | 0.222 | 0.076 | 2.720 | 0.007 |
| H19 _a : Job demands mediates the relationship between self-undermining and work engagement | 0.674 | 0.673 | 0.046 | 14.537 | 0.000 |
| H20 _a : Personal demands mediates the relationship between self-undermining and work engagement | 0.296 | 0.303 | 0.054 | 5.503 | 0.000 |
| H21 _a : Job crafting mediates the reciprocal relationship between work engagement and job resources | 0.649 | 0.650 | 0.054 | 11.911 | 0.000 |
| H22 _a : Job crafting mediates the reciprocal relationship between work engagement and personal resources | 0.058 | 0.056 | 0.023 | 2.471 | 0.016 |
| H23 _a : Self-undermining mediates the reciprocal relationship between work engagement and job demands | 0.138 | 0.139 | 0.039 | 3.556 | 0.000 |
| H24 _a : Self-undermining mediates the reciprocal relationship between work engagement and personal demands | 0.142 | 0.138 | 0.061 | 2.317 | 0.021 |

Note: The corresponding null hypothesis stated in Table 1 is rejected and the alternative hypothesis (H_a) is supported at the 5% statistical significance level if the associated p-value is less than 0.05

4. DISCUSSION

By examining the effects of job demands, personal demands, job resources, and personal resources, as well as their interactions on employee work engagement, researchers addressed the crucial roles of job crafting and self-undermining in the JD-R theory. Hence, this study has brought novelty in the literature on JD-R theory by developing the hypotheses H6a, H8a, H11a, H12a, H15a, H16a, H18a, H19a, H20a and H24a.

The basic assumptions of the JD-R theory are supported by our findings, which posit a positive relationship between resources (job and personal) and work engagement and a negative relationship between demands (job and personal) and work engagement. The research results supported alternative hypotheses H1a, H2a, H3a, and H4a that job demands (role ambiguity, role conflict, role overload, and mental health) and personal demands (workaholism) have significant negative effects on work engagement, as well as job resources (autonomy, performance feedback, supervisor's support, social support, learning and development opportunity) and personal resources (hope, self-efficacy, optimism, resilience, employee religiosity) have significant positive influences on work engagement among the employee of Malaysia. Hakanen et al. (2008) identified that job resources predict work engagement. Xanthopoulou et al. (2013) showed that personal resources (self-efficacy) have a positive relation with work engagement, but optimism has no significant relation with engagement. Job demands and personal demands fundamentally cost effort, while job resources and personal resources fulfill psychological needs. Job demands and job resources have unique effects on work engagement (Bakker & Demerouti, 2018). The original version of the JD-R Model (Demerouti et al., 2001) proposed that if daily workloads become chronic overload, job demands can initiate a health-damaging process. Job demands cause chronic fatigue, eventually leading to physical health problems (including cardiovascular disease).

On the other hand, job resources initiate the motivational process. Because they address basic needs and give employees a sense of purpose, employment resources are motivating and have a positive impact on work engagement (for example, satisfying levels of vigor, dedication, and absorption; Schaufeli & Bakker, 2004). Conservation of resources theory (Hobfoll, 2002; Hobfoll et al., 2018) addresses personal demands as the factor that threatens, obliterates, or depletes valued personal resources. In this context, workaholism is included as personal demands that individuals experience and strive to diminish.

The alternative hypotheses H5a, H6a, H7a, H8a, H9a, H10a, H11a, and H12a were tested to investigate the involvement of the interaction between demands (job and personal) and resources (job and personal). As demands (job and personal) have a significant negative effect on work engagement, job resources decrease the effect of demands (job and personal) on work engagement by playing a moderating role. Similarly, personal resources decrease the effect of demands (job and personal) on work engagement by its moderating effect. Thus, hypotheses H5a, H6a, H7a, and H8a were supported in line with the previous studies. Resources for jobs may reduce the negative impact of work demands on employee engagement (e.g., Bakker et al., 2005; Xanthopoulou et al., 2007). Employees who have plenty of job resources available can cope better with their daily job demands. Bakker & Demerouti (2017) suggested more research to test the moderating effect of personal resources on the relationship between job demand and work engagement. In line with their suggestions, our results echo the findings of Panatik et al. (2011) and Chen (2022) that personal resources moderate the influence of job demands on work engagement. The outcome validates the buffering concept proposed by Kahn and Byosserie (1992) and the JD-R model's resource buffering assumption (Demerouti et al., 2001; Schaufeli & Bakker, 2004).

On the other hand, since resources (job and personal) have a significant positive effect on work engagement, job demands (acts as moderator) decrease the influence of resources (job and personal) on work engagement, and personal demand (as moderator) decrease the effect of resources (job and personal) on work engagement. Therefore, hypotheses H9a, H10a, H11a, and H12a were supported in line with the earlier studies. Bakker & Demerouti (2014) found that job demands amplify the effect of job resources on work engagement, and Tremblay and Messervey (2011) and Bakker and Sanz-Vergel (2013) detailed that job demands increase the effect of personal resources on work engagement. The job demands act as challenges for the employees who particularly love and

enjoy their work. Thus, job resources have a significant positive influence on work engagement when job demands are high.

JD-R theory has incorporated two self-reinforcing paths: positive self-reinforcing, known as job crafting, and negative self-reinforcing is, self-undermining (Bakker & Demerouti, 2017). Based on the result of the present study, job crafting has a significant positive influence on job resources (H13a), and job crafting has a positive effect on personal resources (H14a) that are similar to the past studies, for example, Demerouti (2014) and Bakker and Demerouti (2018) indicated that job crafting definitely could lead to more job resources and personal resources. Hypothesis H16a (personal resources mediate the relationship between job crafting and work engagement) was developed based on the support for H4a (personal resources have a significant effect on work engagement) using T1 data and H14a (job crafting has an effect on personal resources) using T2 data. Since job resources influence employee work engagement (H3a) using T1 and job crafting affects job resources (H13a) using T2, hypothesis H15a was developed that job resources mediate the relationship between job crafting and work engagement. The results of statistical analysis using T2 show that hypotheses H15a and H16a had been supported, indicating a mediating effect of resources (job and personal) on the relationship between job crafting and work engagement. Demerouti (2014) found a similar result that job resources and personal resources mediate the link between job crafting and work engagement. Self-undermining has a significant effect on job demands (H17a) and personal demands (H18a). The hypotheses were accepted by the statistical analysis and supported by the previous studies, for example, Bakker & Wang (2020) and Golu et al. (2022) self-undermining increases the existing level of job demands, and most of the demands are correlated with self-undermining positively (Golu et al., 2022).

Data analysis from T1 demonstrated that job demands have an effect on work engagement (H1a), and self-undermining has an impact on job demand (H17a), according to the T2 data. Thus, hypothesis H19a for T2 was developed that job demands mediate the relationship between self-undermining and work engagement. This result has been supported by Golu et al. (2022), who state that self-undermining leads to increased job demands that could decrease work engagement. Personal demands have an effect on work engagement (H2a), and self-undermining has an effect on personal demands (H18a) based on the statistical analysis of T1 and T2, respectively. Based on this concept, hypothesis H20a was developed using T2, which stated the mediating effect of personal demands on the relationship between self-undermining and work engagement.

The alternative hypotheses H21a, H22a, H23a, and H24a address the mediating effect of job crafting and self-undermining, respectively, on the reciprocal relationship between exogenous variable (work engagement) and endogenous variable (job resources, personal resources, job demands, and personal demands) for T2. Based on the analysis of T2 collected data from Malaysian employees, these hypotheses were supported. Job crafting mediates the reciprocal relationship between work engagement and resources (job and personal). When employees are engaged in work, it inspires them for job crafting, which leads them to increase job resources and personal resources. Self-undermining mediates the reciprocal relationship between work engagement and demands (job and personal). Employees' engagement in work decreases self-undermining, which affects job demands and personal demands.

Bakker and Demerouti (2018) found a similar result that self-undermining leads to a loss cycle of demands, stress, and undesirable behavior, while a gain cycle of resources, work engagement, and desired behaviors is caused by employee job crafting over time. Job crafting mediates the reciprocal link between work engagement and job resources, supporting the hypotheses of expanded JD-R theory (Bakker and Demerouti, 2017) as well as the reciprocal relationship between personal resources and work engagement, while self-undermining behaviors were found to be mediating the reciprocal association of job demands with work engagement as well as the reciprocal relationship between work engagement and personal demands (e.g. Simbula et al., 2011; Xanthopoulou et al., 2009).

5. PRACTICAL IMPLICATIONS AND LIMITATIONS

Practical Implication

Our findings generally highlight the significance of enhancing employee's job and personal resources along with decreasing job and personal demands at work. Employees who have substantial resources from their jobs and personal context might reduce the effect of job and personal demands on their work engagement. Similarly, job and personal demands minimize the impact of job and personal resources on work engagement. Employees with job crafting and self-undermining, however, are capable of minimizing such impacts on their work engagement. In addition to making an attempt to reduce job demands (role ambiguity, role conflict, role overload and mental health) as widely proposed by existing studies (e.g., Skaalvik, 2020), this study suggests that managers help improve employees' personal and job resources at work, which can be achieved by developing and implementing human resource practices that help improve employees' autonomy, performance feedback, supervisor's support, social support, learning and development opportunity, hope, self-efficacy, optimism, resilience, employee religiosity. Researchers especially focused on personal demands, for example, workaholism, which plays a significant role on work engagement in the workplace.

The findings highlight particular needs for the creation and implementation of interventions that support job crafting behaviors in the workplace. Job crafting behaviors enable employees to match their jobs to their personal knowledge, skills, and abilities to increase job and personal resources. Because previous investigations have demonstrated that supportive management and job flexibility positively impact personal and collaborative job crafting behaviors (see Leanna et al., 2009), such treatments may be put into practice either through personal job crafting or in the context of work redesign. Training as described by van den Heuvel et al. (2015), includes classes, a diary for each week's creation, and sessions for the refraction. Conversely, self-undermining behaviors are viewed as mechanisms that are responsible for increasing employees' job and personal demands for leaving their assigned work goals.

This can be achieved, for example, by providing employees with regular training to help them effectively handle difficult contacts with customers, establishing particular SOPs for staff to follow when their workload is harder than normal, and contesting their efforts to help them in order to reach their objectives and receive recognition and appreciation.

Limitations

Although the current study adds to the body of data supporting the necessity for further dynamic interpretation of JD-R theory, it contains important flaws that should be acknowledged. Because all data in this study came from self-report questionnaires, it is likely that common method variance overestimated the observed associations between variables (Podsakoff et al., 2003). To assess the possibility of shared strategy variance, we used the Harman single-factor test. Nevertheless, this strategy has drawn criticism (e.g., Aguirre-Urreta & Hu, 2019). A single common method bias approach (Podsakoff et al., 2003) would have been practicable in the setting and underlying data of this study. Additional post hoc statistical procedures are recommended to handle potential common method bias. As there is currently no highly reliable gold standard, the employment of this alternative method is strongly discouraged (Richardson et al., 2009). Future research should incorporate precautions to lessen the danger of common method variance (CMV), such as constructing their measurements on a variety of sources, including measurable outcomes (such as productivity and absence due to sickness) and evaluations from viewers, managers, or colleagues.

The fact that this study was conducted in Malaysia limits the finding's venerability to other organizations, particular professions, or the Malaysian employed population; the sample was composed of both blue- and white-collar workers. Based on many nations, future studies might be conducted.

6. CONCLUSIONS

According to JD-R theory, high-difficulty job demands, personal demands, job resources, and personal resources, all work together to promote or decrease employee engagement, which has significant organizational implications. In order to prevent burnout and maintain engagement, employees should utilize job crafting, proactive vitality management, and exciting work design, in line with the JD-R theory, which describes how businesses and their managers can have an impact on employee well-being. We look at the development of JD-R, the work-home resources paradigm, and multidimensional methods. We anticipate that this work will advance the field and detail potential directions for further study. New research on job engagement by including both people and their surroundings might be undertaken.

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REFERENCES

- Aguirre-Urreta, M. I., & Hu, J. (2019). Detecting common method bias: Performance of the Harman's single-factor test. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, 50(2), 45-70.
- Andreassen, C. S., Griffiths, M. D., Hetland, J. & Pallesen, S. (2012). Development of a work addiction scale. *Scandinavian Journal of Psychology*, 53, 265–272.
- Bakker, A. B., & Demerouti, E. (2014). *Job Demands-Resources Theory*. In Well-being (pp. 1- 28). John Wiley & Sons, Ltd.
- Bakker, A. B., & Demerouti, E. (2017). *Job Demands–Resources Theory: Taking stock and looking forward*. *Journal of occupational health psychology*, 22(3), 273-185
- Bakker, A. B., & Demerouti, E. (2018). *Multiple levels in job demands-resources theory: Implications for employee well-being and performance*. *Handbook of well-being*, (2018), 1-13.
- Bakker, A. B., & Sanz-Vergel, A. I. (2013). Weekly work engagement and flourishing: The role of hindrance and challenge demands. *Journal of Vocational Behavior*, 83, 397-409.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10, 170–180.
- Bakker, A. B., Ficapal-Cusí, P., Torrent-Sellens, J., Boada-Grau, J., & Hontangas-Beltrán, P.M. (2018). The Spanish version of the Job Crafting Scale. *Psicothema*, 30(1), 136-142.
- Bakker, A., & Wang, Y. (2020). Self-undermining behavior at work: Evidence of construct and predictive validity. *International Journal of Stress Management*, 27(3), 241-251.
- Business Today. (2021). Is The 'Great Resignation' Spreading In Malaysia?
<https://www.businesstoday.com.my/2021/12/03/is-the-great-resignation-spreading-in-malaysia/>
- Chen, I. S. (2022). The moderating role of personal resources in the relationship between job demands and work engagement. *Psihologija*, 55(2), 123-136.

- Choo, S. (2020). *Employee experience trends Malaysia, Qualtrics employeeXM*.
https://www.qualtrics.com/au/lp/ebook/2020-global-employee-experience-trends/?utm_medium=ebook&utm_source=content&utm_campaign=2020-01--apj--my--ebook--ex--2020-malaysia-trends&utm_content=ebook--ex--2020-maylasia-trends
- Clarke, S., Lee, C. H., & Li, Q. (2004). Collective consultation and industrial relations in China. *British journal of industrial relations*, 42(2), 235-254.
- Demerouti, E. (2014). Design your own job through job crafting. *European Psychologist*, 19(4), 237–247
- Demerouti, E., Nachreiner, F., Bakker, A. B., & Schaufeli, W. B. (2001). The job demands resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.
- DRB-HICOM (2019). *Sustainability report*. <https://www.drb-hicom.com/wp-content/uploads/2019/09/DRB-HICOM-Sustainability-Report-2019-Final.pdf>
- Gelfand, M. J., Leslie, L. M., & Fehr, R. (2008). To prosper, organizational psychology should... adopt a global perspective. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 29(4), 493-517.
- Golu, F., Cotel, A., Sava, N. I., Oprea, B., & Condrea, S. (2022). The Link between Job Demands, Burnout, and the Self-Undermining of Healthcare Employees during the COVID-19 Pandemic: An Underestimated Threat? *Healthcare (Basel, Switzerland)*, 10(8), 1408-1408.
- Guglielmi, D., Simbula, S., Schaufeli, W. B., & Depolo, M. (2012). Self-Efficacy and Workaholism as Initiators of the Job Demands-Resources Model. *Career Development International*, 17(4), 375–389.
- Hakanen, J. J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative, and work-unit innovativeness. *Journal of Vocational Behaviour*, 73, 78–91.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of general psychology*, 6(4), 307-324.
- Hobfoll, S. E., Halbesleben, J., Neveu, J. P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual review of organizational psychology and organizational behavior*, 5, 103-128.
- Kahn, R. L., & Byosserie, P. (1992). Stress in organizations. In M. D. Dunette and L.M. Hough, (eds.), *Handbook of industrial and organizational psychology* (vol. 3, pp. 571–650). Consulting Psychologists Press.
- Leana, C., Appelbaum, E., & Shevchuk, I. (2009). Work process and quality of care in early childhood education: The role of job crafting. *Academy of management Journal*, 52(6), 1169-1192.
- Leung, K. (2009). Never the twain shall meet? Integrating Chinese and Western management research. *Management and Organization Review*, 5(1), 121-129.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital*. Oxford University Press, USA.
- Maslach, C. (1986). *Stress, burnout, and workaholism*. In R. R. Kilburg, P. E. Nathan, & R. W. Thoreson (Eds.), *Professionals in distress: Issues, syndromes, and solutions in psychology* (pp. 53–75). American Psychological Association. American Psychological Association.

- Maybank Sustainability Report (2015). *SUSTAINABILITY REPORT 2020* Over RM20 million.
- Maybank sustainability Report (2020). *Leading Asia*. https://www.maybank.com/iwov-resources/documents/pdf/annual-report/2020/Maybank_Sustainability_Report_2020_GRI.pdf
- McMillan, L. H. W., & O'Driscoll, M. P. (2006). Exploring new frontiers to generate an integrated definition of workaholism. In R. Burke (Ed.), *Research companion to working time and work addiction* (pp. 89-107). Cheltenham, UK: Edward Elgar.
- Panatik, S. A., O'Driscoll, M. P., & Anderson, M. H. (2011). Job demands and work-related psychological responses among Malaysian technical workers: The moderating effects of self-efficacy. *Work & Stress*, 25(4), 355-370.
- Plante, T. G., & Boccaccini, M. (1997). Reliability and validity of the Santa Clara strength of religious faith questionnaire. *Pastoral Psychology*, 45(6), 429-437.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Prieto, L. L., Soria, M. S., Martínez, I. M. M., & Schaufeli, W. (2008). Extension of the Job Demands-Resources model in the prediction of burnout and engagement among teachers over time. *Psicothema*, 20(3), 354-360.
- Richardson, H. A., Simmering, M. J., & Sturman, M. C. (2009). A tale of three perspectives: Examining post hoc statistical techniques for detection and correction of common method variance. *Organizational Research Methods*, 12(4), 762-800.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative science quarterly*, 15(2), 150-163.
- Rothmann, S., Mostert, K., & Strydom, M. (2006). A psychometric evaluation of the job demands-resources scale in South Africa. *SA Journal of Industrial Psychology*, 32(4), 76-86.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The Measurement of Work Engagement with a Short Questionnaire: A Cross-National Study. *Educational and Psychological Measurement*, 66(4), 701-716.
- Schaufeli, W. B., Bakker, A. B., Van der Heijden, F. M. M. A., & Prins, J. T. (2009). Workaholism, burnout and well-being among junior doctors: The mediating role of role conflict. *Work & Stress*, 23(2), 155-172.
- Schaufeli, W. B., Taris, T. W., & Bakker, A. B. (2008). It takes two to tango: Workaholism is working excessively and working compulsively. *The long work hours culture: Causes, consequences and choices*, 203-226.
- Seashore, S. E., Lawler, E. E., Mirvis, P., & Cammann, C. (Eds.). (1982). Observing and Measuring Organizational Change: *A Guide to Field Practice*. New York: Wiley.
- Simbula, S., Guglielmi, D., & Schaufeli, W. B. (2011). A three-wave study of job resources, self-efficacy, and work engagement among Italian schoolteachers. *European journal of work and organizational psychology*, 20 (3), 285-304.

- Sime Darby Berhad Annual Report (2021). *Delivering Value Accelerating Forward Our Vision Our Mission*. https://www.simedarby.com/sites/default/files/annualreport-pdf/sime_darby_ar2021_hyperlinked_bookmark_211110.pdf
- Skaalvik, C. (2020). Self-efficacy for instructional leadership: Relations with perceived job demands and job resources, emotional exhaustion, job satisfaction, and motivation to quit. *Social Psychology of Education*, 23(5), 1343-1366.
- Spector, P. E., Allen, T. D., Poelmans, S. A., Lapierre, L. M., Cooper, C. L., MICHAEL, O. D., ... & Widerszal-Bazyl, M. A. R. I. A. (2007). Cross-national differences in relationships of work demands, job satisfaction, and turnover intentions with work family conflict. *Personnel Psychology*, 60(4), 805-835.
- Sun, L. Y., & Pan, W. (2008). HR practices perceptions, emotional exhaustion, and work outcomes: A conservation-of-resources theory in the Chinese context. *Human resource development quarterly*, 19(1), 55-74.
- Taris, T. W., Schaufeli, W. B., & Verhoeven, L. C. (2005). Workaholism in the Netherlands: Measurement and implications for job strain and work-nonwork conflict. *Applied Psychology*, 54(1), 37-60.
- Thompson, B. (2021). *Employee movement and retention report*. Employment Hero, September.
- Tones, M., & Pillay, H. (2008). The learning and development survey: Further evaluation of its psychometric properties. *Australian Journal of Educational and Developmental Psychology*, 8, 85-97.
- Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 Well-being Index: a systematic review of the literature. *Psychotherapy and psychosomatics*, 84(3), 167-176.
- Tremblay, M. A., & Messervey, D. (2011). The Job Demands-Resources model: Further evidence for the buffering effect of personal resources. *SA Journal of Industrial Psychology*, 37(2), 1-10.
- Van den Broeck, A., Van Ruysseveldt, J., Vanbelle, E., & De Witte, H. (2013). The job demands-resources model: Overview and suggestions for future research. *Advances in positive organizational psychology*, 1, 83-105.
- Van den Heuvel, M., Demerouti, E., & Peeters, M. C. (2015). The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being. *Journal of occupational and organizational psychology*, 88(3), 511-532.
- Xanthopoulou, D., Bakker, A. B., & Fischbach, A. (2013). Work engagement among employees facing emotional demands: The role of personal resources. *Journal of Personnel Psychology*, 12, 74-84.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational behavior*, 74(3), 235-244.
- Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T.W., & Schreurs, P. J. G. (2007). When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology*, 22, 766-786.

The Author

Dalowar Hossan

**Ph.D. Candidate, School of Business and
Economics**

University Putra Malaysia, Selangor, Malaysia

ORCID ID: 0000-0002-3139-5880

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