Disentangling Rationales for Leaving: A Quantitative Multidimensional Account of Employee Turnover in Southwestern Nigeria Small and Medium-sized Enterprises (SMEs)

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Abstract: *This paper appraised major reasons employees of Nigerian manufacturing and service SMEs' exit their jobs from a holistic perspective rather than the seemingly parochial voluntary employee turnover angle alone. Following pre-field interviews, quantitative data was collected from 696 respondents adopting two structured survey questionnaires; data was analysed using both descriptive and inferential statistics. Contrary to widely held belief, results revealed that most exits are not necessarily voluntary, but reflect three multifaceted issues (Employee-Induced, Organisationally-Induced and Externally-Induced). Employees reported job alternatives (Exp(β) = 1.438), organisation as a great employer (Exp(β) = 1.301), reward-performance ratio (Exp(β) = .676) and internal opportunities (Exp(β) = .695), as critical to their exit decisions. Owners/managers indicated external job opportunities, employee leaving after training and low salary as playing major roles in their employees' exit decisions. A Revised Model of Turnover of Nigerian SMES employees resulted from the findings.*
Keywords: employee turnover causes, quantitative, multidimensional, Nigeria, SMEs

INTRODUCTION

E-Turnover (E-T) awareness appears to have originated in the West, a context most of earlier studies on the phenomenon were carried out. The earliest known data on USA labour turnover was recorded by Ware in 1931 (Jacoby, 1983) from the records of labour force instability in a New England-based textile manufacturing industry. Jacoby's (1983) account of E-Turnover incidence showed similar astronomically high labour mobility rate in other industries during same period. For instance, in a Massachusetts textile manufacturing firm employing French-Canadians, E-T rate was so high that only about 33% of the employees reportedly stayed, indicating 67% exit rate. So, turnover then was generally high and reportedly common among the *skilled workforce* that was *more mobile* than their *unskilled* counterparts (Ayele, 2022; Jacoby, 1983; Sija, 2022). Essentially, the known recorded business organisations' E-Turnover history dates back nearly a century.

From the foregoing, this paper discusses fundamental factors responsible for high incidence of E-Turnover in the sampled businesses in Southwestern Nigeria. E-Turnover has been defined as *"...the departure of an employee from the formally defined organisation"* (Chaban, 2022; Hancock *et al.,* 2013, p.576) and the rate at which organisational employees disengage and are replaced over a time period, typically a year (Hartzell, 2006; Heath *et al.,* 2024; Olubiyi *et al.*, 2019). Academic and practitioner literature has characterised the turnover phenomenon in different ways based on variables like its context of occurrence, determinants, and impact. For instance, E-Turnover could be termed *voluntary/involuntary, avoidable/unavoidable, functional/dysfunctional, negative/positive;* these labels often indicate some of its unique features. However, in dissonance with common practice of describing most E-Turnover occurrences narrowly as *'voluntary turnover'*, this paper adopts a broader term *'turnover'* to describe employees' exit; the decision was informed by the basic assumption in this paper's underlying research that issues other than employee-related ones may also cause turnover. The basis for the assumption can be found in Price's (2001) suggestion for future turnover research in which the author argues that there was no empirical evidence to support the adoption of the construct, 'voluntary turnover'.

Apart from Jacoby's (1983) early account of high E-Turnover, subsequent literature also indicates that attention has been shifting to studying employees' exit from organisations (e.g. West, 2004). However, despite relevant existing studies, particularly in advanced nations, evidence shows that intent to exit, and actual turnover are still rife (Siyanbola and Gilman, 2017), even in the developed world. For example, a recent study of the fast-food industry in the USA showed a significantly high rate; the study by Bebe reports that *"Employee turnover in the U.S. fast food industry has been high, averaging… [about] 150% per annum"* (2016, p. 4). The author links the high turnover level to employees' satisfaction level.

Although, as previously indicated, there has been persistent interest in turnover studies among scholars and practitioners (West, 2004) due to its potentially problematic nature and costs to businesses, it is argued that a dearth still occurs in studying the phenomenon and related subjects (Akther, 2016; Fernando *et al.*, 2019; Harris *et al.,* 2018; McKluskey, 2024; Obulutsa, 2016; Oruh *et al.,* 2019; Osisiogu, 2017). For instance, in a bid to explore the fundamental reasons employees leave jobs in varied Bangladeshi organisations, Akther argue that *"…Despite employee turnover being such a serious problem in Bangladesh…there is dearth of studies investigating it…"* (2016, p.5). In likened studies, literature and empirical accounts on shortages of employee turnover research (Siyanbola and Gilman, 2017), and Human Resource Management Practices (HRMPs) studies have also been reported by Fernando *et al.* (2019) in the study of Sri Lankan Tech-based SMEs.

Africa in general, the West Africa sub-region, and Nigeria in particular, are some of the milieus such void in empirical literature and knowledge exists about turnover-related studies and its causes; this, among other issues, indicates the significance of this paper. In Nigeria, E-T intentions and actual exits have become problematic for the economy, researchers and practitioners (Akwara, 2014; Ohunakin *et.al.*, 2016, 2018); unfortunately, appropriate studies are in short supply (Oruh *et al.*, 2019). Oruh and

colleagues' study on Nigeria's health sector reveals that despite E-Turnover prevalence in the country, dedicated studies are a rarity. In addition, it is suggested that even where turnover-literature research is available, most of the empirical studies have been devoted to businesses in Western contexts (e. g. Batt and Valcour, 2003; Bebe, 2016; Holtom *et al.*, 2005; Maertz *et al.*, 2007; Van Breukelen *et al.*, 2004; Willard-Grace *et.al.,* 2019). Therefore, dedicated researches are reportedly sparse in contexts and cultures other than the West (West, 2004).

Just as understanding turnover is important (Boys, 2024), so is being knowledgeable about reasons people leave organisations, particularly as soaring turnover imposes enormous costs and disruption on businesses. The resulting E-T costs are sometimes instantaneous, creating instability and uncertainties for the firms concerned (Carter *et al.*, 2019; CIPD, 2010; Frank *et al*., 2004; Hancock *et al.*, 2013; Hoffman and Burks, 2020; Ninroon *et al.*, 2020; Sibson 2000; Sumbal, 2018; Van der Aa *et al.*, 2012). While Hoffman and Burks (2020) report newly trained workers' exit as costly to the firm, Ninroon *et al*. (2020) connect the cost to new hires, their training, and human capital and knowledge losses. Consequently, the knowledge of the havoc E-T wreak on various businesses means *"...understanding and managing it* [turnover] *better can provide considerable benefits"* (Maertz *et al.*, 2007, p.1059) in an uncertain world where talents' retention becomes increasingly essential to access human capabilities for sustained competitive advantage (Pfeffer, 2005).

Research Objective

The principal aim of this paper was to carry out exploratory research on fundamental issues that trigger workers' exit in Nigerian manufacturing and service SMEs. As part of the main goal, and as indicated in the previous section, the preliminary research assumed that turnover may be due to other issues apart from employees-related ones, and those also needed to be investigated. This led to the premise in the next section of this paper.

Research Hypothesis

From the foregoing, the following hypothesis was formulated:

H_1: *Factors other than those connected to the employees are also responsible for employee turnover in Nigeria's SMEs.*

The Paper's Conceptual Framework

The framework in figure 1 was adapted mainly from Price's (2001) E-Turnover structure (appendix 1), and conceptualised in line with the gaps identified by the author's suggestions for further research. Price suggests that the concept of *'turnover'* be adopted in future research to describe employee exits rather than *'voluntary turnover'* commonly adopted in past studies. Price (2001) argues that *"No systematic empirical evidence existed to support the hypothesised difference between voluntary and involuntary turnover; nor is there much current data to support the difference" (2001, p.600).* The author also explains that once variables under consideration are multi-dimensional, e.g. including external factors, the term 'voluntary turnover' becomes unjustifiable. As shown in figure 1, the factors investigated were complex and included a range of employees' personal issues as well as those connected to organisations and external factors. Other selected turnover studies examined were Currivan (1999), Sager *et al.* (1998), and West (2004).

From the foregoing, the contents of figure 1 were developed with the assumption that E-T would likely be precipitated by the following multidimensional issues: *employee-related* (responsibilities to families, personal values, status etc.)*, organisational-related* (supervisor support, promotion, autonomy etc.)*, and external factors* (expected utility of withdrawal, opportunities, job alternatives etc.). Within the same model, and as suggested by Price (2001), it was assumed that an employee may commence search for another job prior to contemplating leaving the organisation; this assumption was later tested in the study. The next section presents the methodology adopted in the research. In order to achieve the objectives, the core themes in the conceptual framework were operationalised to allow for their proper measurement.
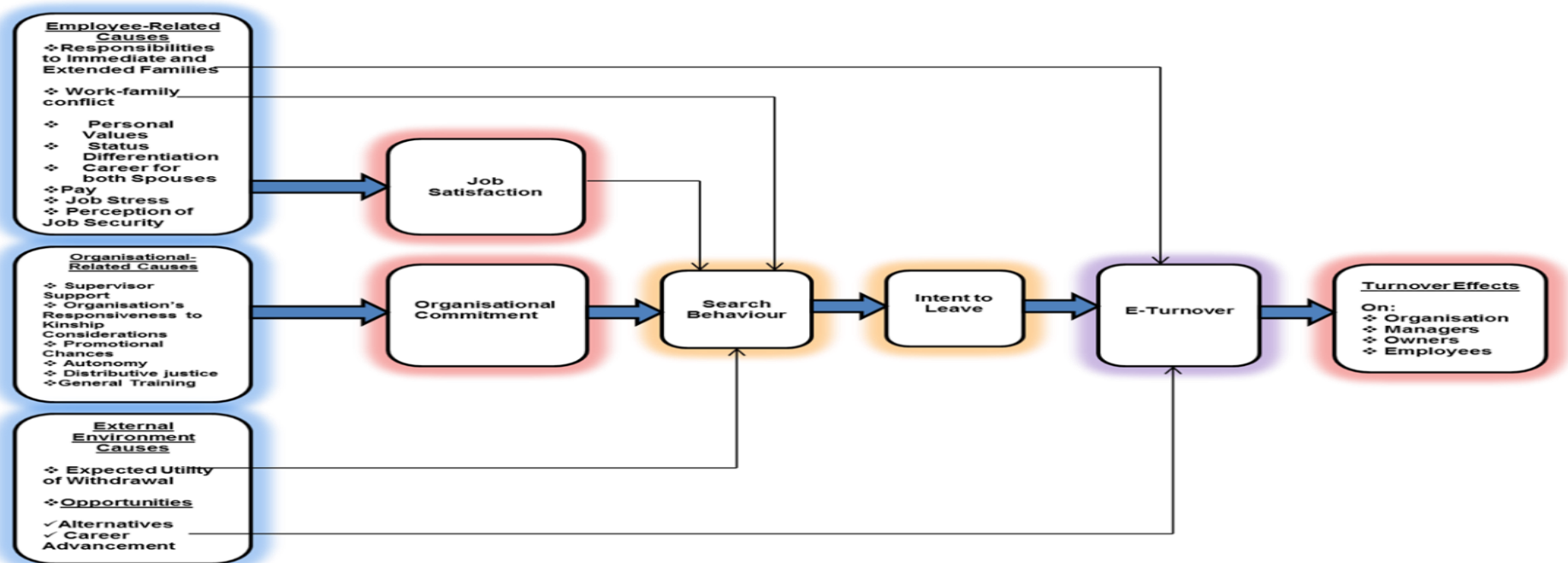
Figure 1: A Conceptual Model of Turnover for Employees of Nigerian SMEs'

Source: Model adapted by author from the Causal model of turnover (Price, 2001), and developed based also on gaps identified in the reviewed literature.

Note: Some of Currivan's (1999) suggested factors were also adopted.

METHODOLOGY:

Although the main study was quantitative in nature, the overall methodology adopted arguably qualifies for a two-stage phased mixed methodology given that a pre-field was first done using 16 preliminary qualitative interviews among 9 employees, 4 managers and 3 owners to assess the nature of E-Turnover in seven SMEs at selected government industrial clusters in southwestern Nigeria. That first stage set the scene for the content of the items contained in the questionnaire for the main study; however, template questions from Price (2001) [a significant scholar in the E-T field], and Currivan's (1999) conceptual model of E-Turnover were also adapted. More than a thousand copies of two questionnaire types were sent out to both employees and owners/managers, and 696 (602 employees and 94 owners/managers) were returned from 94 SMEs in analysable format.

As hypothesised in the framework for this paper (figure 1), survey questions were developed in three main categories adopted as key themes: *employee-related, organisation-related and external-related issues;* the focus was to determine whether turnover causes were attributable to any, or a combination of the three broad categories. For emphasis's sake, the thesis of this paper is that in addition to employees-related causes, commonly alluded to in relevant extant literature, turnover may also emanate from other sources. Hence, classifying most exits as voluntary turnover may be erroneous, particularly as empirical evidence on such classification is lacking (Price, 2001). Based on these assumptions, data was collected, not only from employees, but also owners and managers of each of the businesses sampled.

Due to the exploratory nature of the study, analyses were done chronologically. During data preparation, missing data was treated through *imputation method*, deemed particularly appropriate for exploratory research adopting nonlinear *Categorical Principal Component Analysis* (CATPCA) to avoid loss of crucial information from the data (Ferrari *et al*., 2011). Data imputation is the *"Substitution of estimated values for missing or inconsistent data items*..." (Ferrari *et al*., 2011). Once treated that way, the dataset got upgraded to a somewhat complete dataset for further analysis.

Various quantitative analyses were done in stages on the collected data; both descriptive (correlational) and inferential (regression) analyses were adopted to explain E-T. At the initial stage of the regression analysis, data items were grouped using CATPCA, before major turnover determinants were identified using regression analysis. Alternatively called *Optimal Scaling* in SPSS, CATPCA is a data reduction technique that allow items in the research instrument to be reduced to the critical ones only. CATPCA also applies optimal scaling quantification to items to accommodate variables of different types and measurement (Ellis *et al*., 2006; Funayama *et al*., 2013). Prior to the CATPCA, *multicollinearity* tests were carried out among the predictor variables to prevent excessively high correlation. Although collinearity tests are usually not compulsory

since such is normally adjusted for during calibrations, it was still applied for clarity and better understanding of the data. The variables derived from the CATPCA results were later entered into the regression models for further insight into how they would finally behave in explaining turnover in businesses.

While Binary Logistic Regression (BINLOGREG) analysis was appropriate for employees' data because the criterion variable was dichotomous, Categorical Regression (CATREG) analysis was carried out on owner/managers' data because all the variables (criterion and predictors) were ordinal and structured using the 5-point Likert scale (Starkweather and Herrington, 2012). At the onset, employees' data predictor questionnaire items were 53 in number (Appendix 2), then CATPCA was gradually adopted to reduce them to the final 22 factors (figure 2) for further analysis. The decision to retain 22 variables was made because the 22-variable-model explained more variance - *41.078%* (see table 1) compared to *28.96%* explained by the original 53-variable-model, indicating that most of the 31 variables excluded probably had low explanatory power, and were mostly redundant within the model. Essentially, the 22 variables and their loadings on to the two dimensions explained over *41%* of the variation in E-Turnover level, so the model's explanatory power was stronger enough for further analysis. The next section details the analyses results.

Research Findings and Discussion:

From the preliminary analysis of Categorical Principal Component Analysis (CATPCA), reliability analysis was done for both employees' and owners/managers' questionnaire contents on two dimensions (DIMs). Both DIMs for employees' data produced Cronbach Alpha Coefficients of *.851* for Dimension 1 (DIM1) and *.766* for DIM2; as for owners/managers' data, the two dimensions produced *.825* and *.619* for DIM1 and DIM2 respectively. By implication, three of the dimensions met the generally acceptable minimum reliability level of .70 alpha coefficient for further analysis, while the fourth was fairly below that level. However, the fourth was still deemed usable for various reasons: firstly, the lower coefficient could have been caused by the size of data collected or the number of variables, and discarding data for such reasons is deemed unwarranted (Helms *et al*., 2006). Secondly, Helms *et al.* (2006), and Onwuegbuzie and Daniel (2002) note that low alpha coefficient should not be a rationale for revising or discarding data, and third, it was more than the *.50* that is sometimes reported in many existing reputable publications.

Variance Accounted For (VAF) by the Final 22 Key Variables in Employees' Model and their Component Loadings (CL)

Table 1 for employees' data shows the result from the final 22 predictor variables, the *Variance Accounted For* (VAF) by each, and their corresponding *Component Loadings (CL)*. VAF indicates the significance of each predictor in the variation that occurred in employee turnover (the Criterion Variable), while CL are indicators of Pearson's correlations between the quantified variables and the principal components, indicated by DIMs. The Dimensions (DIM1 and DIM2) representing those variables usually have values ranging from -1 to 1 (Linting *et al.*, 2007). Although variables loaded differently to both dimensions, the values for many of them were higher on DIM1 than DIM2; however, both dimensions represent different themes.

While items with the highest loadings in DIM1 appear connected to *employee-related* and *external-related* issues, those on DIM2 seem *organisation-related.* For instance, ***Employee-related*** variables include perception of *reward-performance ratio (.725) and cost-benefit analysis of current and potential jobs (.656),* ***external variables*** include *comparison of salary with peers to achieve similar social status (.641) and the need for adequate salary to assist family members (0.608),* and ***organisational-related*** variables include *supervisor concerns* (*.740*) and *employment relations* (*.606*). The results support the original thesis of this paper that employee exit reasons are deeper than it being just voluntary.

Additionally, in table I, each of the 22 predictors were rated 1st-22nd in descending order of importance, depending on their respective loading weight, and irrespective of which dimension it loaded to. So, based on their VAFs in table I, 10 predictors had the most contribution to employees' exit decision, namely: *Supervisor concern (.593)[1st], ratio of rewards to performance (.527)[2nd], supervisor support (.498)[3rd], awareness by employees that their skills and knowledge are useful to other employers (.470)[4th], employees financial responsibility to families (.465)[5th], cost-benefit analysis of employees' current and potential jobs (.442)[6th], employees' perception that people are only sacked due to incompetence (.439)[7th]* [employees perceive they are unlikely to be sacked if they are competent and hardworking], *employees' belief that continued loyalty to current employer is only possible if salary allows them to attain status similar to their peers (.435)[8th], chance for better external job alternatives with another employer (.435)[8th], and adequacy of salary to assist family members (.403)[10th].*

Table I: Ranking of Employees' Variables Based on their CL and VAF in the 22-Component CATPCA Output

Variable ID	Variable description	Loading 1	Loading 2	VAF
ExternalOpportunities Quantification[8th]	Chance of better job opportunities with another employer	.600	.275	.435
EmpIndFinResponsibility Quantification[5th]	Employees should be financially responsible for family members	.587	.346	.465
AdeqSalTAFM Quantification[10th]	To stay in the current job, salary should be adequate to assist family members	.608	.183	.403
AchivablePerform Quantification[11th]	Happy to stay in current job if performance is achievable	.603	-.193	.401
RewodVsPerform Quantification[2nd]	Ratio of reward to employees' performance	.725	-.029	.527
ContndLoyalty Quantification[8th]	Continued loyalty possible if salary allows similar social rank as peers	.641	-.154	.435
OtherSupervisorsConcern Quantification[1st]	My immediate supervisor shows concern for me in my job	.213	.740	.593
ImmediateSupervisorsupport Quantification[3rd]	Support from my supervisor encourages me stay in current job	.265	.654	.498
InternalOpportunity Quantification[19th]	Lack of opportunity in my job may make me search for a better alternative	.504	-.307	.348
ChoiceOfHowJobIsDone Quantification[20th]	Generally, I am able to choose the way I do my job	.323	.478	.333
PromotionsBySeniority Quantification[22nd]	Perception that promotion by employer is mainly by seniority	.063	.551	.308
SackForIncompetence Quantification[7th]	Employees perception that people are only sacked due to incompetence	.651	.121	.439
Skills+knowledgeNeededElsewhere Quantification[12th]	My skills and knowledge are needed by other employers	.587	-.215	.391
Skills+KnowledgeUsefulElsewhere Quantification[4th]	My skills and knowledge are useful with another employer	.644	-.236	.470
EaseOFindingEqualyGudJob Quantification[21st]	It will be generally easy for me to find a job as good as the current one with another employer	.511	-.247	.323
EaseOfJobForCareerEnhance Quantification[13th]	It will be generally easy to find alternative job to advance my career	.240	.571	.384
Cost-BenefitAnalysis Quantification[6th]	Comparing the cost and benefits of current job to potential jobs	.656	-.109	.442
GreatPresentEmployer Quantification[17th]	Present employer is a great organisation to work for	.251	.553	.369
DoNotCareAboutPresentEmployer Quantification[18th]	I really do not care about my present employer	-.470	.367	.356
JobChangeIsAcceptable Quantification[14th]	I do not see any problem with changing jobs	.472	-.389	.374
GoodEmploymentRelations Quantification[16th]	Relationship with my employer has encouraged me to stay	-.068	.606	.371
EmployerHelpfulfamily-related matters Quantification[15th]	My employer is helpful in family-related matters	-.153	.592	.373
Sum of eigenvalues		*5.319*	*3.719*	*9.037*
Total variance accounted for (VAF)		24.175	16.903	**41.078**

Source: *Author's Extraction from employees' SPSS 20 CATPCA data output*
Notes:
    a. *CATPCA = Categorical Principal Component Analysis; VAF = Variance Accounted For.*

b. *Numbers 1st - 22nd ranked variables based on Eigenvalues (1st contributed the most VAF while 22nd contributed the least);*
c. *Values in VAF column are eigenvalues, and represent the VAF ranking (VAF values are based on the eigenvalues; the higher the eigenvalues, the higher the VAF).*

Visual clustering of employees' variables into employee-related, organisation-related and external-related issues from the CATPCA output

Apart from the higher variance that the 22 final variables explained compared to the original 53, adopting the 22 also benchmarked Price's (2001) model that contained only 22 variables, and made the picture clearer. Although two dimensions were specified for the CATPCA output, the variables automatically separated into *three distinctive groupings* through their CL points (figure 2), with related correlating vectors moving close to each other. DIM1 emerges as two secondary groups *(employee-related and external-related issues)* as interrelated variables got closer to form clusters. Essentially, figure 2 visually show variables connected to the two original dimensions, and what has emerged as the *third group* created in-between them. *Employee-related* issues cluster along DIM1, *organisation-related* issues cluster mainly along DIM2, and *external issues* group is placed in the middle of the two, though closer to DIM1; the three groups are identified and labelled within the boxes.

It is important to note that the identified variables represent a mixture of factors from the three broad categories conceptualised for this research. In light of this, the initial argument that *E-Turnover causes are not just employee-related* (voluntary turnover)*, but are also due to organisational and external issues* is upheld. Moreover, it is observed that the five most significant factors, from employees' viewpoint, are connected to organisational and external issues.

In order to summarise the issues deemed most critical to causing E-Turnover from employees' perspective, figure 3 was developed from table I based on the Variance Accounted For (VAF) by each predictor within the regression model. Again, in line with this paper's thesis, but contrary to commonly held extant opinion that most exits are mainly personal or *voluntary* (e.g. Price, 2001, 1977; Price and Mueller 1981), figure 3 suggests that a combination of *personal, organisational and external matters* are critical in employees' exit decisions. By implication, issues that trigger E-Turnover are multifaceted.
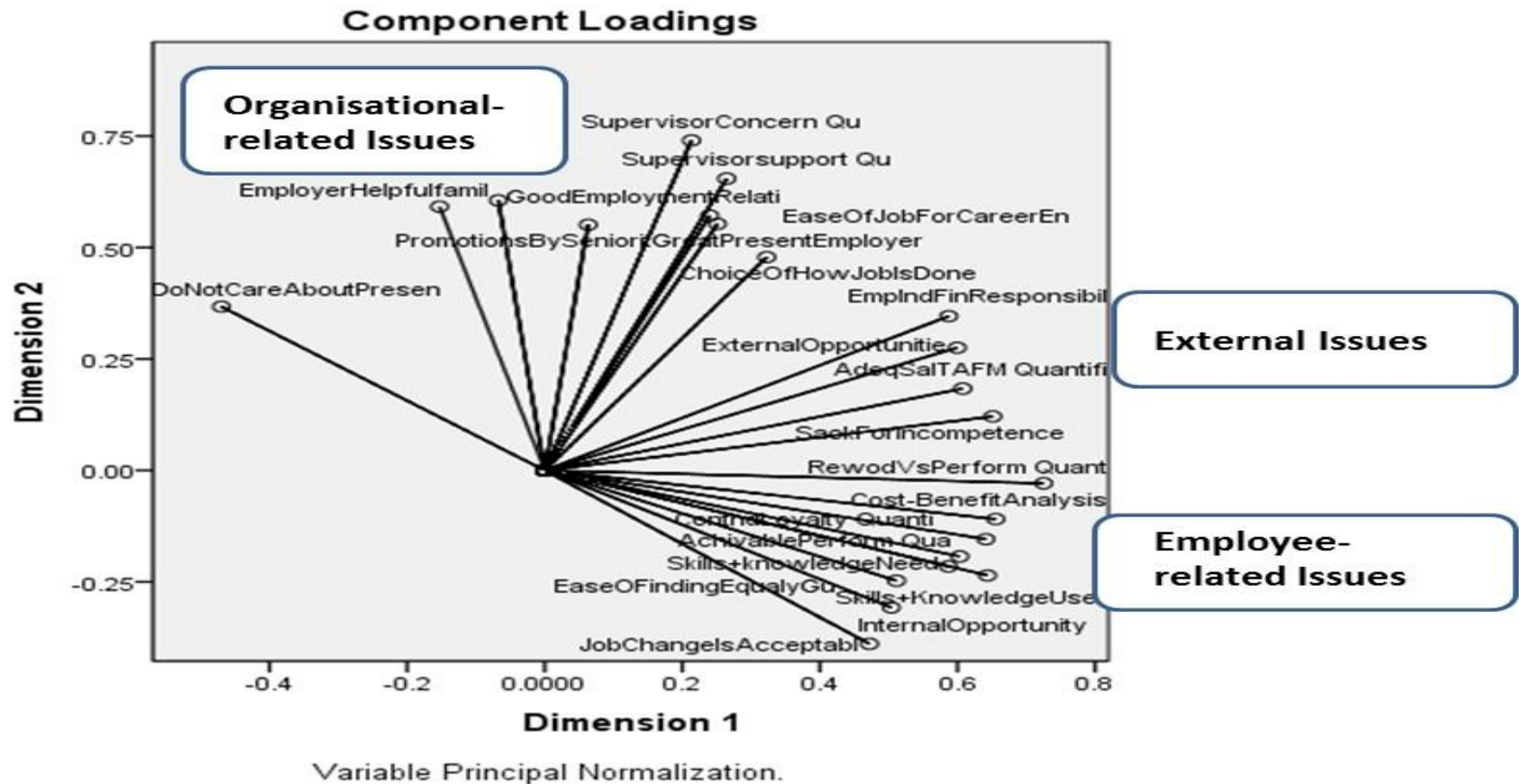
Component Loadings

Variable Principal Normalization.

Figure 2: CL Plot Depicting How Parts of the 22 Retained Employees' Variables (Determinants) Coalesce into the 3 Broad Categories of Causes

Source: Extracted diagram and author's further illustration from Employees' survey data generated from SPSS 20 CATPCA output

Notes:
  i. **The 22 variables formed three distinctive clusters automatically divided into the three categories/clusters purposively conceptualised in this research (see the labels within each box);**
  ii. **Variables in each cluster have similar characteristics and are highly and positively correlated (Linting et al., 2007, p.350);**
  iii. **Variables at 180% angles are correlated but negatively, and those at 90% angles are uncorrelated (Linting et al., 2007, p.350).**
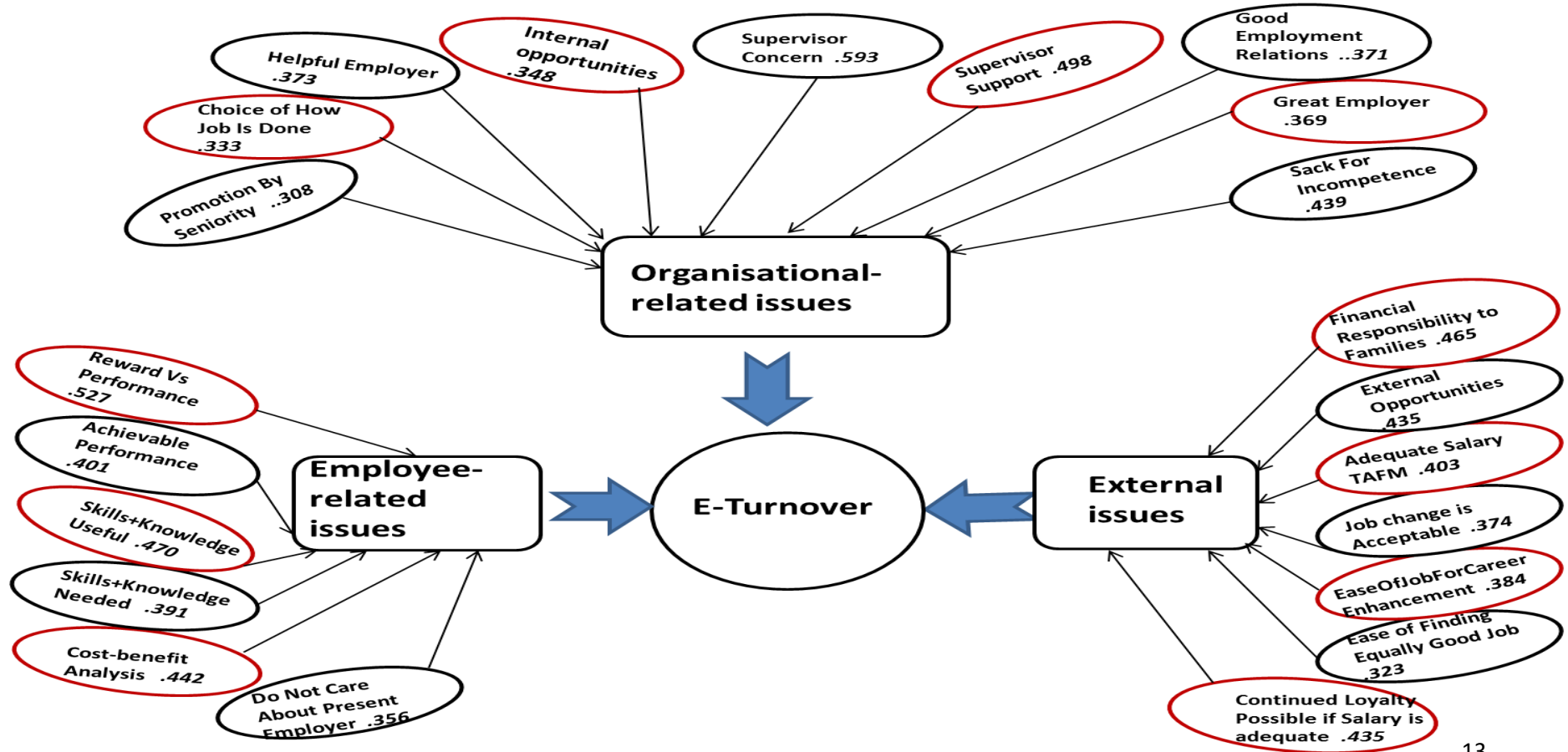
Figure 3: The Grouping of CATPCA Variables into Employee-Related, Organisation-Related and External Issues and the Strength of their VAFs - Employees' Perspective

Source: Author's constructed model from CATPCA output in Table 1, identifying the significance of each predictor to Employee Turnover.
Notes: The figures are VAF values by each predictor.

Results and discussion of CATPCA from Management's perspective
Similar to employees' model, E-Turnover causes were also investigated from management's perspective using CATPCA; the main goal was to assess management's results as presented in table II prior to comparison with employees' results.

Variance Accounted For (VAF) and Component Loadings (CL) in management's model
In semblance to employees' data, table II reflect items loading to Dimension1 (DIM1) as mainly connecting to *employees' issues (e.g. low salary and welfare)* and *external-related issues* (*e.g. external job opportunities, marriage, and work-family conflict* [WFC]); whereas *organisational-related issues* (*e.g. employees leaving soon after training and supervisor issues*) loaded mostly to DIM2. The two dimensions and items loading on to them are significant enough to account for nearly two-thirds (66.43%) of the changes that occurred in the level of E-T in the SMEs; hence, adequate for further statistical analysis.

Table II: Component Loadings and VAF for the 9 Variables In Managers/Owner's Survey Data

Variable ID	Variable Description	Loading 1	Loading 2	VAF
Inadequate Welfare[6th]	Inadequate welfare provision	-.789	.212	.666
ExtJobOpportunities[3rd]	Better external job opportunities	-.714	-.478	.737
Left After Training[4th]	Employee left after training to enhance job status	-.424	.717	.691
Low salary[1st]	Inadequate salary to cover increased responsibilities	-.875	.248	.829
Marriage[8th]	Marriage related issues	-.707	-.123	.516
Work-Family Conflict[5th]	Conflicting demands of employee's work and family	-.707	-.433	.686
ImprovPersStatThruEduc[9th]	Left to improve personal status (e. g. further education)	-.280	.632	.485
Lack of Supervisor Support[7th]	Lack of support from supervisor	-.339	.698	.608
UnfavourMgmtAttTowadsEmpFamResp[2nd]		.695	.528	.761

	Unfavourable attitude of management towards employees' family-related responsibilities			
Sum of eigenvalues		*3.755*	*2.224*	*5.978*
Total variance accounted for		*41.721*	*24.706*	*66.427*

Source: Generated by the author from SPSS 20 CATPCA output from management's data
Notes:
    a. **CATPCA = Categorical Principal Component Analysis; VAF = Variance Accounted For;**
    b. **Numbers 1st – 9th = Ranking of variables based on eigenvalues (1st contributed the most VAF, 9th contributed the least);**
    c. **Values in VAF column are eigenvalues; they represent VAF ranking (VAF values are based on the eigenvalues, so the higher the eigenvalues, the higher the VAF)**

Visual Clustering of the 7 retained management' variables into the 3 broad categories of causes from CATPCA Output

The 9 items in the original management model (table II) had to be reduced to the strongest 7 based on their VAF (Variance Accounted For) values after several test analyses due to the clumsiness of the Component Loadings (CL) graph for the original 9 items (see Appendix 3). Once the two weakest variables were removed from the model, the result in figure 4 shows a clearer separation of the 7 remaining variables into three broad categories of ***employee-related*** *(perception of inadequate welfare and inadequate salary),* ***organisation-related*** *(employees leaving after training to enhance job status, lack of support from immediate supervisor and unfavourable attitude of management towards employees family-related responsibilities) and* ***external causes*** *(work-family conflict and better job opportunities outside of the organisation).* By implication, and in line with employees' data results, management's data also indicates that E-Turnover is not just of voluntary nature; rather, issues to do with the organisations (SMEs) themselves and those of external nature were also responsible for employees exiting their jobs.
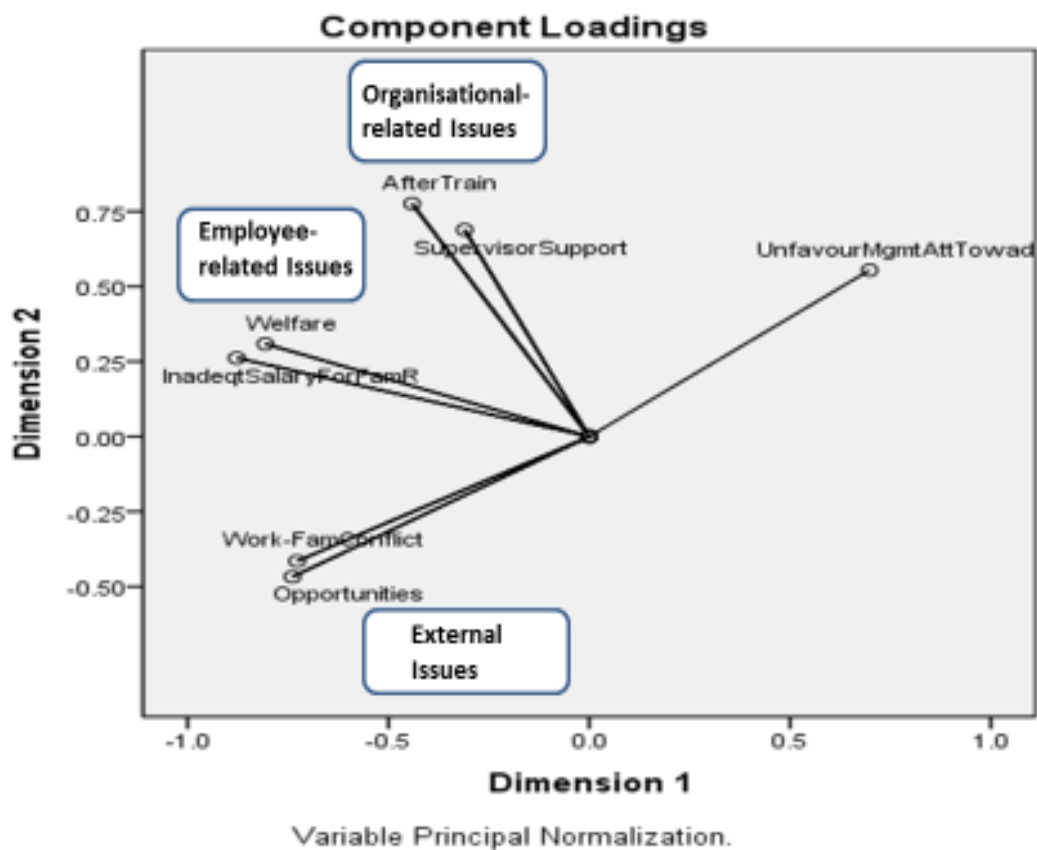
Figure 4: CL Plot Depicting How the 7 Retained Managements' Variables Coalesce Into the 3 Broad Categories of Causes

Source: **Author's diagrammatic illustration adapted from management's SPSS 20 survey data CATPCA plot**

Notes:
  i.   The 7 variables formed three distinctive clusters, each containing items with similar characteristics;
  ii. They appear to have automatically separated into the three categories purposively conceptualised in this research;
  iii. Variables in the same group are highly and positively correlated, those at 180% angles are correlated but negatively, while those at 90% angles are uncorrelated (Linting et al., 2007, p.350).

Figure 5 depicts a representation of management's responses to the seven E-T predictors in three broad categories of employee-related, organisation-related and external-related issues (see previous paragraph for details of the items linked to each of the three groupings). But, more specifically, the figure indicates that *low salary (.829), unfavourable attitude of management towards employees' family-related issues (.761), external job opportunities (.737)* and *employee leaving after training (.691)* were the four most significant issues from owners'/managers' perspective. Essentially, management reckoned that *supervisor support, inadequate welfare* and *work-family conflict* were not as important to employees' decision to exit their jobs. The significance of these results is that one of the most important causes of E-T (i. e. *organisation's responsiveness to employees' family concerns)* identified by Price (2001) as *"...worthy of investigation."* (p.604) is supported by this paper.
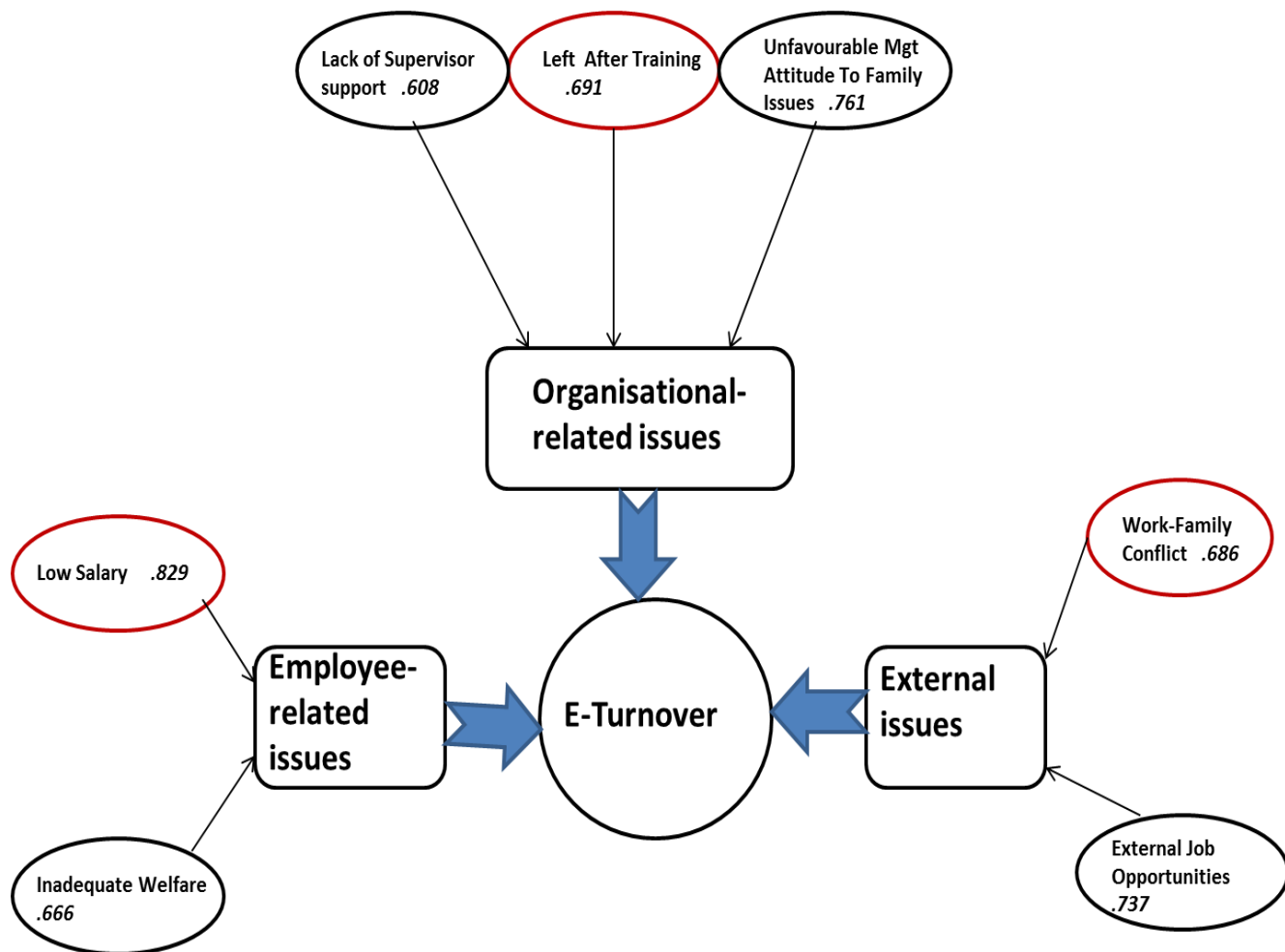

Figure 5: Model Showing Employee-Related, Organisation-Related and External Causes of E-Turnover and the Strength of their VAFs - Management's Perspective

Source: Author constructed model from management's CATPCA output for the 7 most significant E-T causes

Notes: The figures are VAF values for each of the variables (table II).
Convergence and divergence in employees' and management's views about which variables are significant in employees' exit decisions

In this section, an attempt is made to compare the variables responsible for E-Turnover from employees' and management's perspectives. However, a problem arose: *direct comparison* was difficult without evaluating like-for-like (i. e. similar variables), and given that two separate questionnaires were administered to the two respondent types, though asking related questions, all variables similar to those in management's model had to be extracted from employees' model and separately analysed for that particular purpose. The result of the extracted items component loadings (CL) and VAF is presented in table III; the content of this table would be compared in table IV with that of management previously discussed in table II.

Table III: Component Loadings and VAF for the 9 Extracted Variables in Employee's Survey

Variable ID	Variable Description	Loading 1	Loading 2	VAF
Welfare adequacy[2nd]	Adequacy of welfare Provision	.513	.577	.596
ExtJobOpportunities[1st]	Better external job Opportunities	.552	.631	.703
Left After Training[5th]	Employee left after training to enhance job status	.673	.034	.454
Low salary[6th]	Inadequate salary to cover increased family Responsibilities	.574	.343	.447
Marriage[4th]	Marriage related issues	.594	-.447	.553
Work-Family Conflict[3rd]	Conflicting demands of employee's work and family	.540	-.516	.558
ImprovPersStatThruEduc[7th]	Left to improve personal status (e.g. further education)	.577	-.331	.443
Supervisor Support[9th]	Lack of support from Supervisor	-.258	.260	.134
MgtAttitudeToFamilyMatters[8th]		-.126	.490	.256

	Unfavourable attitude of management towards employees' family-related responsibilities			
Sum of eigenvalues		2.410	1.734	4.144
Total variance accounted for		26.775	19.272	46.047

Source: **Generated by author from SPSS 20 CATPCA output from employees' data**
Notes:
   a. **CATPCA = Categorical Principal Component Analysis; VAF = Variance Accounted For;**
   b. **Numbers 1st – 9th is the ranking of the variables based on eigenvalues (1st contribute the most VAF while 9th contributed the least);**
   c. **Values in VAF column are actually eigenvalues, representing the VAF ranking (VAF values are based on the eigenvalues, so the higher the eigenvalues, the higher the VAF)**

Table IV compares employees' and management's views to highlight the commonalities and dissonance about issues central to employees' exit decisions. In descending order of importance, the five most important issues indicated by employees as critical to their exits decisions are: *better external job opportunities[1st], welfare adequacy[2nd], work-family conflict[3rd], marriage-related issues[4th] and employees leaving soon after training[5th]*, all but one (*welfare*) of these appeared to be linked to organisational and external factors. By contrast, and in the same order, the most significant issues in management's view are: *low salary[1st], attitude of management to employees' family responsibilities[2nd], external job opportunities[3rd], employees leaving after training[4th], and work family conflict[5th]*.

Despite that some issues are mutually recognised by both sides, a wide gap in the perceptions of both sides regarding E-Turnover causes still exists. The obvious discrepancy in both views manifest in that some issues that are top five on employees list (e. g. external job opportunities and work-family conflict) are bottom five on owners'/managers' list. This implies that management's perception is probably not in tune with employees' views on the main reasons the latter exit jobs. Essentially, management appeared somewhat misguided about key issues which employees care about and consider when deciding on whether to leave or stay.

Table IV: Comparing Employees' and Management' Rating of the 9 Factors Based on the 9-Variable Model

Variable ID	Variable Description	VAF	
		Employees	Management
Welfare adequacy	Adequacy of welfare provision	2nd	6th
ExtJobOpportunities	Better external job opportunities	1st	3rd
Left After Training	Employee left after training to enhance job status	5th	4th
Low salary	Inadequate salary	6th	1st
Marriage	Marriage related issues	4th	8th
Work-Family Conflict	Conflicting demands of employee's work and family	3rd	5th
ImprovPersStatThruEduc	Left to improve personal status (e.g. further education)	7th	9th
Supervisor Support	Lack of support from supervisor	9th	7th
MgtAttitudeToFamilyMatters	Attitude of management towards employees' family-related responsibilities	8th	2nd

Source: Extracted by the author from comparing employees' and management's data using SPSS 20 CATPCA output

Results and discussion of regression analysis: Employees' perspective

After Categorical Principal Component Analyses (CATPCA), *Binary Logistic Regression* (BINLOGREG) in SPSS 20 was applied to employees' model because the criterion variable was dichotomous while the predictor/explanatory variables were ordinal. *Categorical Regression* (CATREG) in SPSS 20 was applied to management's model because all

variables (criterion and predictors) were ordinal with responses structured using 5-point Likert scale. BINLOGREG is most appropriate when the outcome variable is dichotomous and the predictors are of any form (nominal, ordinal, interval/ratio etc.) [Starkweather and Herrington, 2012]. Detailed results from both regression analyses are presented in the paragraphs that follow.

Table V shows an extract of the four most significant transformed variables *(TRA)* out of the final 22 included in the BINLOGREG model for employees' data. The variables' significance was determined by the values of their *β coefficient*, Exponential *β* coefficient [Exp($β$)], Wald statistic and the significance *(p-value)*. The *β* value for each predictor is the expected amount of change in E-Turnover for a unit change in that predictor. Exp($β$) is the odd ratio associated with each predictor; and for any predictor to critically impact the criterion variable, the corresponding Exp($β$) has to be greater than 1.0. Predictors that have lesser effect within the logit model will normally display a value ≤ 1.0 (Starkweather and Herrington, 2012).

Based on these criteria, and focusing particularly on Exp($β$) coefficient and *p-value* in descending order of significance, the overall results from employees' perspective indicate the following as fundamental to their job exit decisions: ***general ease of finding job alternative[1st]*** (TRA9) with *Exp(β) = 1.438, β = .363, p = .012, and Wald = 6.250,* ***employee's perception of organisation as a great employer to work for[2nd]*** (TRA20) with *Exp(β) = 1.301, β = .264, p = .046, and Wald = 3.977,* ***internal opportunities within the organisation[3th]*** (TRA8) with *Exp(β) = .695, β = -.364, p = .012, and Wald is 6.305, and* ***ratio of reward to employees' performance[4th]*** (TRA3) with *Exp(β) = .676, β = -.392, p = .024, and Wald = 5.060.* The latter two were deemed reportable because of their significant *p-values*.

Interpreting the results in the context of turnover determinants means that a unit change in the *ease of finding an equally good job alternative and employee's perception of organisation as a great employer to work for* will exponentially increase/decrease the odd of E-Turnover occurring *by 1.438* and 1.301 times respectively. However, despite being significant within the model, *internal opportunities and reward-performance ratio* have lesser impact with their respective *Exp(β) coefficients equalling* .695 and .676 respectively (i.e. <1) for every unit expended on each to manage E-T issues. In essence, while the first two will yield better returns on investment for organisations, the last two could result in near term losses; they are, however, still important enough for management to note.

Table V: The Most Significant Variables in Employees' Model

Variable ID	Variable description	B	S.E	Wald X^2	Df	Sig. (p)	Exp(β) (Odds ratio)	95% C.I for Exp(β)	
								Lower	Upper
TRA9	*The general ease of finding job alternatives that is as good as current one*	.363	.145	6.250	1	*.012*	*1.438*	1.082	1.913
TRA20	*Employees perceive organisation as a great employer to work for*	.264	.132	3.977	1	*.046*	*1.301*	1.005	1.686
TRA3	*Ratio of reward to performance*	-.392	.174	5.060	1	*.024*	*.676*	.480	.951
TRA8	*Opportunities internal to the organisation*	.364	.145	6.305	1	*.012*	*.695*	.523	.923

Source: Extracted by the author from Binary Logistic Regression (BINLOGREG) output from SPSS 20 (Employees' data)

a. **All the 22 Predictors were entered on step 1: TRA1_1, TRA2_1, TRA3_1, TRA4_1, TRA5_1, TRA6_1, TRA7_1, TRA8_1, TRA9_1, TRA10_1, TRA11_1, TRA12_1, TRA13_1, TRA14_1, TRA15_1, TRA16_1, TRA17_1, TRA18_1, TRA19_1, TRA20_1, TRA21_1, TRA22_1.**

b. *Variables were transformed/rescaled from their original types into scaled items to make them similar and analysable for inferential analysis (regression) because they were of mixed types. Some of them were ranked, while others were in interval.*

Results and Discussion of Regression Analysis: Management's Perspective

As previously indicated, Categorical Regression (CATREG) analysis was adopted to identify the key factors in employee exit decisions from owner/manager's view.

Table VI shows a high correlation between the observed and predicted values of the criterion variable (R = *.681)*. There is an R^2 value of *.464* and an Adjusted R^2 value of *.319* meaning that after the variance was adjusted for the number of observations and other

issues, the model still accounted for *31.9%* of the changes in E-Turnover. The ANOVA part of the table assesses the overall significance of the model, and the model is significant at *(p<0.05)*. Although none of the standardised *β* coefficient for each predictor was up to *1.0,* but based on their *p-values*, table VI still reveal three factors (out of nine) that are influential in predicting reasons employees exit jobs from management's viewpoint. They are: *better external job opportunities (ExternlJobOportunity) with p=.017, F=4.319 and β =.349; employees leaving after training to enhance job status (LeftAfterTraining) with p=.012, F=3.480 and β=.323;* and *low salary (LowSalary) with p=.016, F=3.265 and β =.368.* Essentialy, the three factors should be the focus for management in its efforts to curb unnecessary employee exits. The next section compare employees and owner/managers responses on E-Turnover determinants from the regression analyses' results.

Table VI: Variance Explained, Overall Model Significance, and the Contribution of Each Predictor to Managements' Model

Model summary				
	Multiple R	**R Square**	**Adjusted R Square**	**Apparent Prediction Error**
Standardized Data	.681	.464	***.319***	.536

Dependent Variable: *Aware That E-T Occurs*
Predictors: *InadequateWelfare, ExternlJobOportunity, LeftAfterTraining, Low Salary, Marriage ,Work-FamConflict, ImprovPersStatThruEduc, LackOfSupervisSuport, UnfavourMgmtAttTowadsEmpFamResp*

ANOVA					
	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Regression Residual Total	44.040 50.960 95.000	20 74 94	2.202 .689	3.198	***.000***

Dependent Variable: Aware That E-T Occurs
Predictors: *InadequateWelfare, ExternlJobOportunity, LeftAfterTraining ,Low Salary ,Marriage, Work-FamConflict, ImprovPersStatThruEduc, LackOfSupervisSuport, UnfavourMgmtAttTowadsEmpFamResp*

Coefficients					
	Standardised Coefficients				
	Beta	**Bootstrap (1000) Estimate**	**Df**	**F**	**Sig.**

		of Std. Error			
InadequateWelfare	-.117	.223	2	.275	.761
ExternlJobOportunity	.349	.168	2	4.319	*.017*
LeftAfterTraining	.323	.173	4	3.480	*.012*
Low Salary	.368	.204	4	3.265	*.016*
Marriage	-.300	.226	3	1.760	.162
Work-FamConflict	-.194	.267	1	.530	.469
ImprovPersStatThruEduc	.093	.258	1	.130	.720
LackOfSupervisSuport	.013	.235	1	.003	.957
UnfavourMgmtAttTowadsEmpFamResp	.095	.221	2	.184	.832
Dependent Variable: Aware That E-T Occurs					

Source: **Extracted by the author from Categorical Regression (CATREG) output from SPSS 20 (Management data)**

Notes: **See table 4 for full description of each of the independent variables.**

A comparison of employees' and management's perspective on E-Turnover determinants from the regression analyses' results

While the regression results of employees' data point to four major areas namely: *the general ease of finding equally good job alternatives, employee's perception of organisation as a great employer to work for, ratio of reward to employees' performance and internal opportunities* as fundamental to their exit decisions, those of management indicate: *better external job opportunities (job alternatives), employee leaving soon after training and inadequate salary* as the three major considerations for exiting jobs. From figure 6, the two sets of factors show interesting converging and diverging points; the only key converging point was **opportunities for job alternatives** as a cause of E-Turnover, otherwise all the other identified causes from both results conflicted. From these, it is deducible that although the converging *pull-factor* of external job alternatives opened to employees may not be so much under the control of management, nonetheless, management failed to recognise even those issues controllable within the organisation which employees appear to find germane to their exit decisions like: *employee perception of the employer, ensuring employees are adequately rewarded in return for good performance, and creating opportunities* for such employees internally. Since these three issues are fundamental to employees' concerns, it could in turn encourage them to stay if they feel positive that the issues are being addressed by management. For instance, Biggadike *et al*., (2023); Gu (2023), and Waikayi *et al.* (2012) report that leadership skills which engender friendly and positive attitude, combined with a favourable working environment do facilitate retention; this could create positive perception of the organisation among employees, thereby reducing exit tendencies.
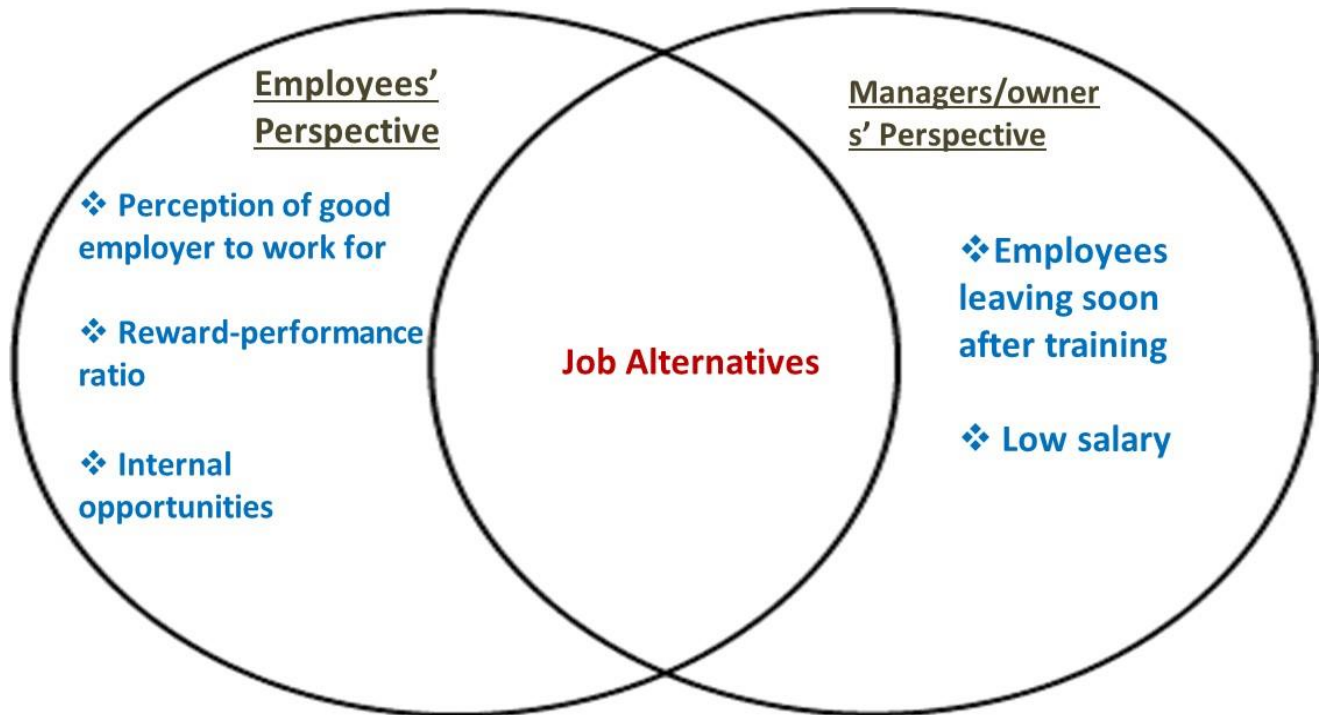
Figure 6: A Comparison of Employees' and Managements' Perspectives on Turnover Determinants from the Regression Results

<u>Source:</u> **Model constructed by the author from the regression results of employees' and managements' views on turnover determinants**

<u>Notes:</u>

   i.   **The construct within the intersection *(job alternatives)* indicates that the determinant is common to both, and recognised by the two perspectives *(Convergence);***

   ii.   **Constructs on each side are viewed by such corresponding side as important determinants, but not by the other *(Divergence).***

The Revised Model of E-Turnover for Employees of Nigerian SMEs

In light of the changes to some of the variables in the original model of 16 potential causes in figure 1, figure 7 presents a revised model of E-Turnover for employees of Nigerian SMEs containing 18 causes of E-Turnover extracted from research findings. The model's structure look the same at first glance, however, many changes occurred in the cause of the research, particularly because new themes emerged from the research results. Therefore, in

addition to the 6 factors from the original 16 still contained in the model, twelve (12) new ones emerged from the results of both the CATPCA and regression analyses, under the original three major E-T categories, the twelve are:

- ***Employee-Induced Causes (EIC):*** *Welfare adequacy, cost-benefit analysis of current and potential jobs, reward-performance ratio, and achievable performance.* In this category, only salary/wage (identified as **pay** in figure 1) was retained to make the new items *five*;
- ***Organisationally-Induced Causes (OIC):*** *Other supervisors' concern, training, internal opportunities, employment relationship, and image of organisation as a good employer.* Only **organisational responsiveness to family concerns and immediate supervisor concerns** were retained and added to the new ones to make *seven*;
- ***Externally-Induced Causes (EIC):*** *Applicability of skills and knowledge to new jobs, culture of job change as an acceptable norm and marital status.* In this category, only **availability of job alternatives and employees' responsibility to family members** were retained and added, while **work-family conflict** moved from employee-related to external issues because that was how it was categorised by the respondents.

Essentially, six of the original 16 were retained, with 12 new items added as a result of the study, making 18 factors *(figure 7).*
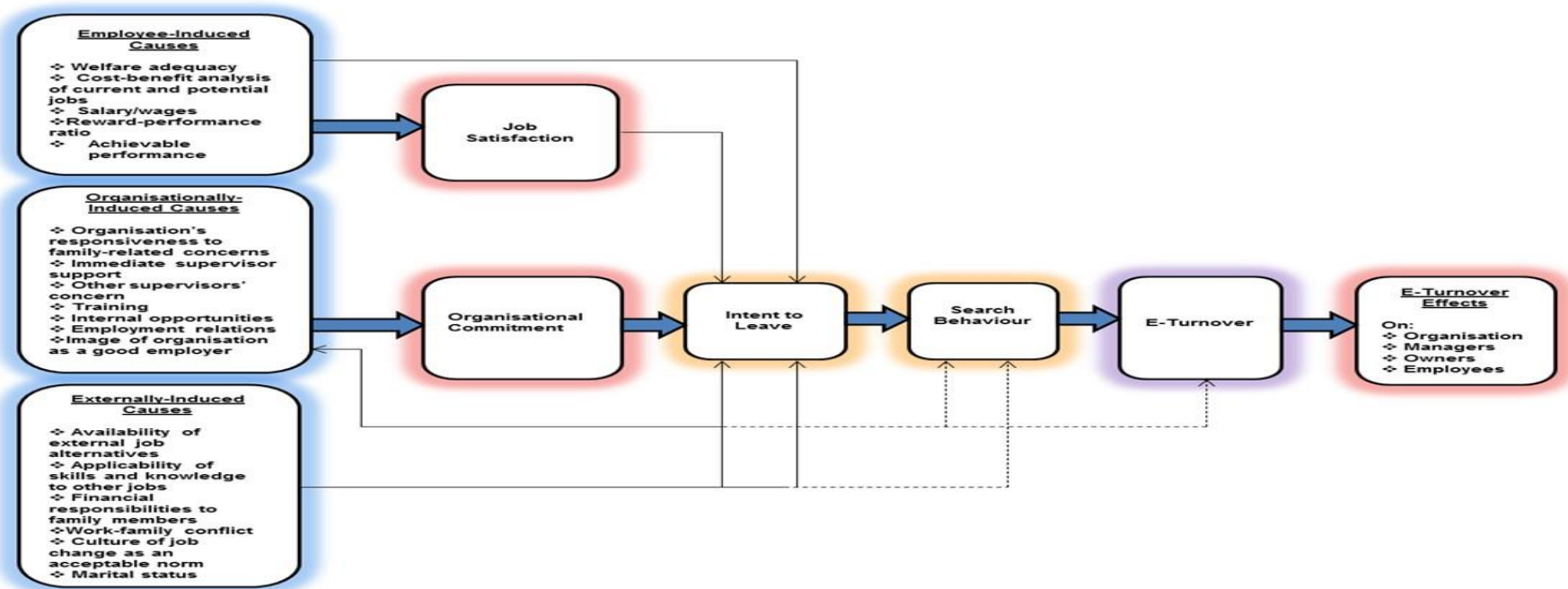
Figure 7: The Revised Model of Turnover for Employees of Nigerian SMEs Based on Research Findings

Source: Author constructed revised model from CATPCA and Regression results

Summary

This paper assessed the fundamental causes of Employee-Turnover in manufacturing and service SMEs in Nigeria. In line with the original *hypothesis* that reasons employees exit from workplace were more complex than just resulting from employee issues alone, results indicated that the causes are of three origins: Employee-Induced Causes *(EIC),* Organisational-Induced Causes *(OIC),* and Externally-Induced Causes *(EIC).* The revised 18-factor E-T model tagged '*The Revised model of Turnover for employees of Nigerian SMEs'* described in the previous section brought about fundamental changes to the contents of the original model adapted from Price (2001): 6 of the original 16 assumed causes were retained, and 12 new ones emerged from the study findings.

Additionally, the revised model introduced a contradiction to Price's (2001) model that predicted employee's *Job Search Behaviour* (JSB) as preceding *Intent To Leave* (ITL) [see appendix 1], by revealing that **Intent-To-Leave precedes Search Behaviour;** the study results in this regard align with Sager *et al*. (1998) proposition**.**

Implications for Practice:

Rather than being somewhat in denial that most employees exit voluntarily, managers need to recognise that other causes such as those that are organisation-related and external environment-linked also need attention for cost-effective managerial decision making.

CONCLUSION

In view of the results of the E-T causes presented in this paper, it is concluded that most employee exits are not necessarily voluntary all the time, rather turnover is attributable to three underlying issues; so, they could be tagged: *Employee-Induced, Organisationally-Induced and Externally-Induced* causes. Each of these is further broken down into smaller factors including *5 employee-related*, *7 organisationally-related* and *6 externally-related issues*, making *18 sub-causes* altogether. Moreover, it can be argued that contrary to common believe in some turnover studies that employees' job search behaviour precedes intent to exit, these results showed an opposing view.

Essentially, these two key findings represent this paper's *contribution to existing E-Turnover literature in general, and the knowledge of employees' job exit causes* in particular.

Suggestion for Future Research

The introduction of an adjusted turnover model for employees of Nigeria's SMEs provides an avenue for its further testing and applications; it will be pertinent to apply it not only to Nigeria's setting, but in similar West African and African settings. It will also be informative to test the reversed order of Intent to Leave that precede Search Behaviour in this study contrary to other existing studies (e.g. Price, 2001). Lastly, it could also have been more elaborate if Nigeria's diversity indices namely: *culture and mini-cultural entities, ethnic groupings, zones of origin, language, religion* etc. were considered during data collection and analyses. This way, the model would likely be more extensively contextuallised within African situation given that available E-Turnover theories and frameworks were developed mostly in the West for Western organisations and context (West, 2004), thus appearing unsuitable for other contexts (Hofstede and Bond, 1984). In light of this, Banerjee (2022) opines that there is the need to decolonise management theories.

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Appendix 1: Causal Model of Turnover (Price 2001) [Based on Price's "Reflections on Determinants of Turnover]
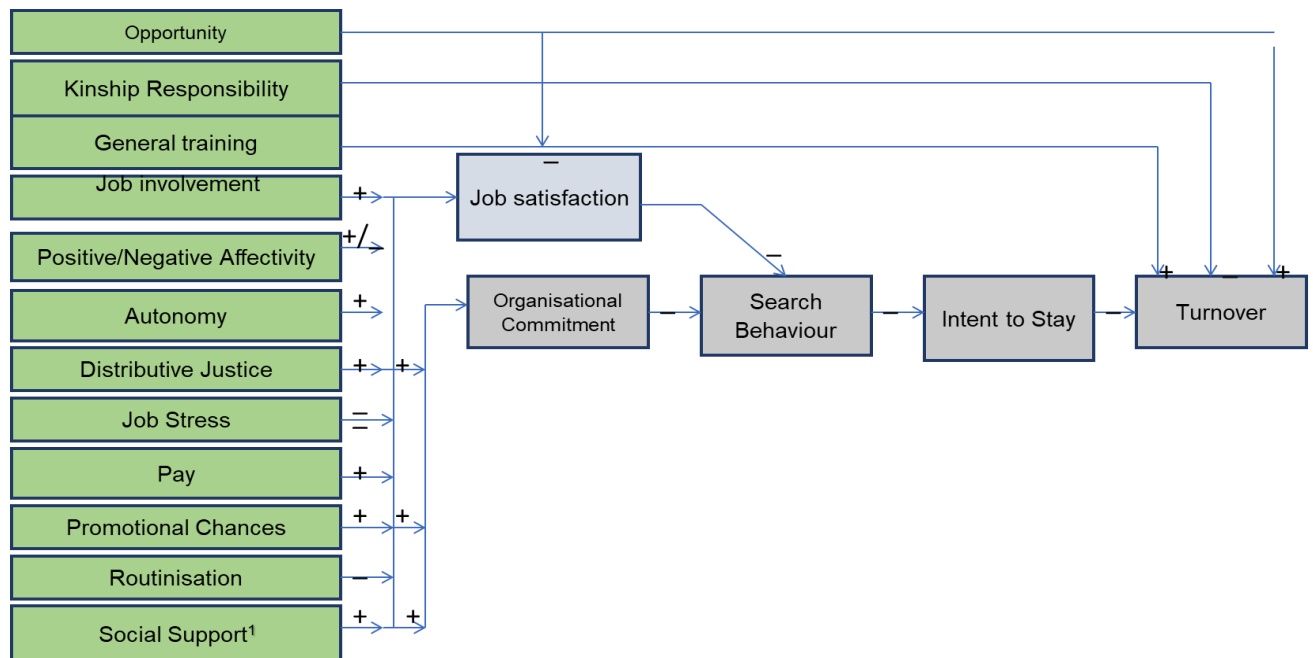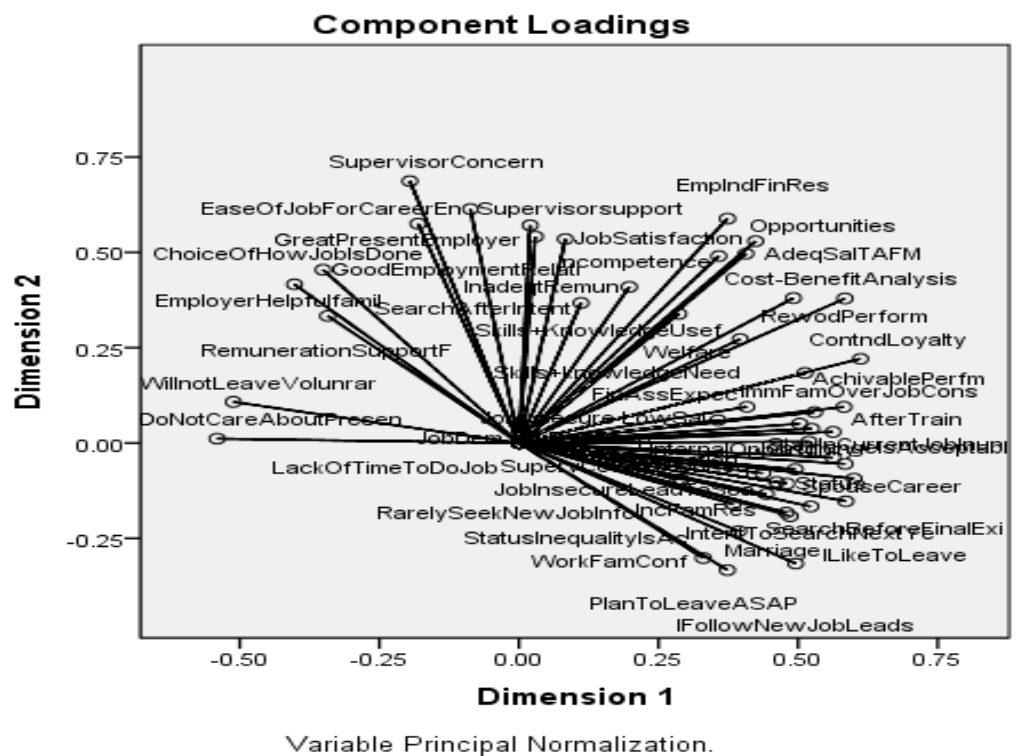

Source: Price (2001)
Key:
+ = Positive relationship
- = Negative Relationship
1 = Only Supervising Support has impact on job satisfaction and organisational commitment

Appendix 2: Plot showing the clumsiness in the CL of the original 53 items before excluding the 28 weakest items from the model
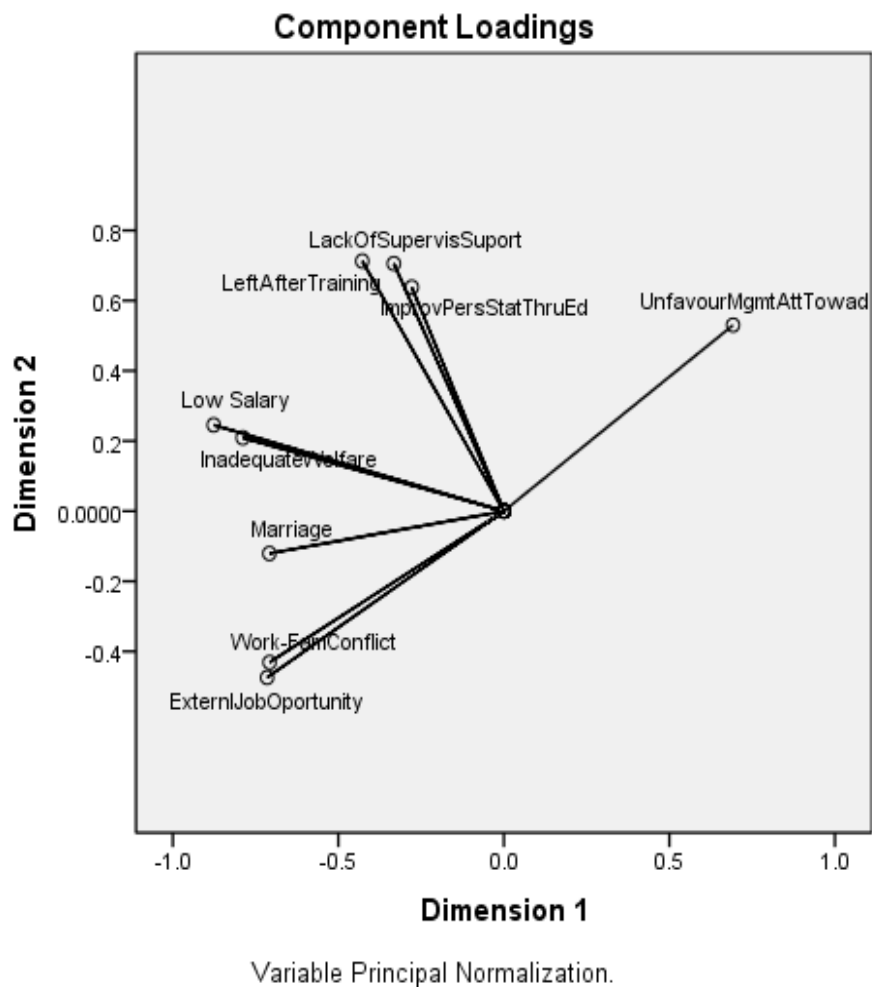

Source: Plot generated by the author from employees' survey data using SPSS 20 CATPCA

Notes:
   i.   **Variables were too many;**
  ii.   **Hence, the output was too clumsy for clear identification of the most important variables;**
 iii.   **No clear categories emerged**

Appendix 3: Plot showing CL of the 9 original items in management's model before removing the weakest 2 items from the model

Component Loadings

Variable Principal Normalization.

Source: Plot generated by the author from management's survey data using SPSS 20 CATPCA

Notes:

i. **The 9 original variables are not clearly separated and appeared to have 4-5 unclear groups.**