This study develops a model that predicts distributor performance in network marketing organisations. Distributor performance is conceptually linked through formal hypotheses to perceptions of marketing mix, organisational commitment, job satisfaction and customer profile. Data was gathered from 500 network marketing distributors to test two nested models, one with job satisfaction as a determinant of performance, and the other with performance as a determinant of job satisfaction. The findings revealed that there was greater model parsimony when the causal direction of the performance/job satisfaction relationship was such that performance causes job satisfaction. The results support several of the a priori hypotheses and suggest that the perceptions of the marketing mix variable are not directly linked to performance, but that the relationship between the variables is mediated by the organisational commitment variable. Implications of the study to network marketing practitioners and avenues for further research are provided.

*To whom all correspondence should be addressed.

Introduction

According to Kotler’s (1997) typology of retailing for consumer products, network marketing is a form of direct selling, which along with direct marketing and automatic vending belongs to nonstore retailing. Direct marketing differs from direct selling in that the former uses a non-person-to-person communication mode (as in catalogue marketing, television direct response marketing, telemarketing and electronic shopping), while the latter uses person-to-person communications and presentations.

In essence, network marketing (NWM) is a way of organising sales operations of a direct selling organisation (Peterson & Wotruba, 1996; Berry, 1997; Biggart, 1990). It is a non-store approach to retailing and distribution of goods and services, directly to the customers. NWM embodies the essence of free enterprise by providing an opportunity for the interested individuals or independent contractors to run a home-based business.

Instead of a supply organisation constructing a large administrative and sales force comprising of employees, self employed independent contractors are encouraged to build a sales organisation of persons like themselves, by using a unique coaching and training system called sponsoring. In this system of sponsoring, the distributor (sometimes referred to as an independent contractor or a direct salesperson) shares their knowledge and expertise with new entrants learning the business for the first time. In return for this commitment the sponsor earns commission based on a percentage of the sales from those recruited, subject to the structure of the organisation plan (Kustin & Jones, 1995).

In addition to the overriding commission the independent contractor also earns income from his/her own retail sales. The support functions of recruitment, training, motivation, small order collection, and account control are delegated to distributors who should be able to provide the support functions more efficiently. This clearly indicates the enormous responsibility shouldered by distributors who are invariably independent contractors over which the NWM organisation has only limited control.

NWM is growing rapidly globally as more direct selling organisations are adopting the NWM concept in organising the operations of their salesforce (Berry, 1997). In the UK the NWM industry has grown from £72million to £272million retail sales per annum in ten years between 1983 and 1993 (Clothier, 1994). In Japan alone there are more than 1.2 million NWM distributors, (Gabriel, 1993). According to Kustin and Jones (1995) NWM in Australia is growing rapidly with approximately 500 000 distributors generating an annual turnover reaching two-billion dollars. In the US there are 174 direct selling companies and 3 996 067 salespeople generating retail sales of $9,7 billion (Wotruba, 1992). In South Africa the NWM industry is still in its infancy, Clarke and Clarke (1996) report that there are approximately 158 000 NWM distributors in South Africa generating approximately R1,3 billion sales per annum.

Given the size and the rapid growth of NWM in the past decade, it is surprising that it has captured very little research interest. While there is a stream of empirical studies examining salespeople’s performance dating back to 1959 and beyond (Churchill, Ford, Hartley & Walker,
1985), there are no studies that examine the simultaneous effect of distributor performance and its antecedents in the NWM context. Performance is more important in a NWM context considering the limited control the NWM organisation has over distributors, and given that distributor performance directly results in revenue for the firm.

The role of NWM distributors differ from that of traditional salespeople primarily because NWM distributors are independent contractors who deal with an unanticipated array of demands from both their customers and their networks. Furthermore, they work outside the boundaries of their NWM organisations thus making it difficult for NWM sales managers to spark and influence their performance.

The aim of this study is to introduce a model that predicts distributor performance in NWM organisations. The study focuses on the simultaneous effect of three organisational variables (perceptions of marketing mix, organisational commitment, job satisfaction) and the customer profile variable on performance. The conceptual framework of the study and the hypotheses are presented in the next section. The methods used to test the hypotheses are then discussed. The results based on analysis of data collected from 500 NWM distributors are presented. The paper concludes by discussing the implications of the study, identifying the limitations of the study and providing directions for further research.

**The conceptual framework**

Based on extant theory and empirical research, performance has been conceptualised as having four antecedents, job satisfaction, organisation commitment, perceptions of marketing mix, and customer profile. Figure 1 depicts the hypotheses tested in this study. The hypothesised effects and the interrelationships among the variables are examined below.

![Figure 1: A proposed model of distributor performance](image)

**Performance and antecedents of performance**

Literature views performance as managerial evaluation of sales effectiveness as well as organisational citizenship behaviours (Kohli, Shervani, & Challagalla, 1998; MacKenzie, Podsakoff, & Ahearne, 1998). Performance as defined by NWM sales managers consist of personal sales volume productivity, sales volume generated by one’s network, and the number of distributors introduced in the network. The NWM definition of performance puts much emphasis on the sales activities and the number of distributors recruited in the network.

This study postulates that distributors are able to generate more sales and recruit more distributors in their network if they are committed to their organisations, they enjoy their jobs and have positive perceptions to the organisation’s marketing mix. Performance is also determined by the distributor’s customer profile. It is argued that distributors’ social contacts have a higher propensity to purchase network marketing products than prospects outside the distributors’ social circles and this would result in increased performance.
Job satisfaction

There is a wide body of literature that links job performance to job satisfaction although there is no consensus about the causal direction of the relationship between the two variables. In examining the literature it has been found that there are two positions that have emerged. One position views job satisfaction as an antecedent of performance, such that past job satisfaction causes present performance. The second position looks at job satisfaction as the effect of performance, such that previous performance causes present job satisfaction.

Bagozzi (1980) explored the direction and nature of the relationship between job satisfaction and job performance and hypothesised that performance will influence job satisfaction, but that satisfaction will not affect performance significantly. The results of Bagozzi’s study indicate that salespeople are motivated by the anticipated satisfaction that comes with performance more than they are by the performance itself.

The results indicate that job satisfaction does not necessarily lead to better performance. There is some empirical evidence to support these findings (MacKenzie et al., 1998, Wotruba, 1990). On the other hand Futrell and Parasuraman (1984) support the notion that greater job satisfaction leads to increased performance. Several studies provide conflicting evidence to this link (e.g. Sheridan, 1992; Birnbaum & Somers, 1993).

Organisational commitment

Organisational commitment is defined as the salesperson’s attachment to an organisation manifested through an identification with its goals and values (Sager, 1990). Support for the hypothesis that organisation commitment is positively associated with performance as specified in Figure 1, is provided by MacKenzie et al. (1998), Bluedorn (1982) and Porter Steers (1973) who report a significant positive relationship between the two variables. Indeed, distributors who display high levels of organisation commitment are expected to generate more sales and build bigger networks of distributors.

This study also predicts a positive relationship between job satisfaction and organisational commitment. Consistent support for a link between organisational commitment and job satisfaction is provided in a number of studies (Bluedorn, 1982; Williams & Hazer, 1986; and Sager, 1990).

Customer profile

Customer profile is a variable that captures the extent to which NWM distributors sell to their friends and family. Although the relationship between customer profile and performance has not been empirically explored, this study predicts that the greater the extent to which distributors sell to their friends and family, the better their performance. The basis of this hypothesis follows from the work of Biggart (1990) who found that direct selling organisations pursue profit by making social networks serve business ends.

Perceptions of marketing mix

Perception of marketing mix is a variable that captures the perceptions of distributors to the components of marketing mix namely, place or convenience, price, and product. Literature has established that the consumers’ perceptions of product range, product quality, price, and place influence the purchase decision of consumers. (Kustin & Jones, 1995; Sargeant & Mswele, 1999, Raymond & Tanner, 1994; Peterson, Albauam, & Ridgway, 1989). This study postulates that if distributors hold favourable perceptions of the organisation’s marketing mix, they will exhibit a higher organisational commitment and they are more likely to generate a higher level of sales and to have the necessary confidence to introduce a large number of people in their networks. Although there is no evidence of the impact of the perceptions of marketing mix on job satisfaction it is hypothesised that the two variables are positively associated as specified in Figure 1.

Research methodology

Research design and sample

Mail questionnaires were sent to 3000 NWM distributors from NWM organisations in South Africa. Two weeks before the questionnaires were mailed, a pre-test was conducted using a sample of 50 NWM distributors. Minor changes regarding terminology were made. Five hundred questionnaires were returned, resulting in a 16.7% response rate.

The typical respondent was between the ages 41-50 years with high school education. There were more female respondents (76.8%) than males, with more distributors participating part-time (64%) than full-time. Fifty six percent of the respondents were black and 42% white. More than 40% of the respondents had been involved in their NWM organisations for more than two years.

Variables and measures

Distributor performance

In consultation with the management from NWM organisations, it was agreed to measure distributor performance using three indicators: (1) the number of distributors recruited during the preceding 12 months; (2) their average monthly turnover including the turnover of their team; (3) their monthly personal sales.

The three indicators were used as measures of performance because the NWM organisations use identical criteria to assess the performance of their distributors. Moreover, all the incentives that the organisations had developed are based on these three criteria. The responses were scored on a scale of 1-3, with 1 = ‘low performers’, 2 = ‘average performers’ and 3 = ‘high performers’.
Job satisfaction

Job satisfaction was measured using the shorter version of the industrial salesperson job satisfaction scale (INDSALES) developed by Comer, Machleit and Lagace (1989). The original INDSALES was developed by Churchill, Ford and Walker (1974). In its original format the INDSALES scale has 95 items relating to seven dimensions of job satisfaction: (1) attitude towards the job, (2) fellow workers, (3) supervisors, (4) company policy and support, (5) pay, (6) promotion and advancement, (7) customers.

The shorter version of the INDSALES by Comer et al. (1989) consists of 28 items with the same number of dimensions, (seven). The dimension ‘promotion and advancement’ was not included because it is irrelevant in the NWM context. Distributors are not employees of their host NWM organisations, hence promotion in the sense described in the scale is not applicable. The wording used in describing the items was changed and appropriate NWM terminology was used. Each item was measured on a 5-point Likert scale ranging from ‘strongly disagree’ to ‘strongly agree’. Item scores were summed for all six dimensions to form an overall job satisfaction score.

Organisational commitment

Mowday, Porters and Steers (1979) developed an instrument to measure attitudinal commitment, the Organisational Commitment Questionnaire (OCQ), consisting of 15 items. In this study the shortened version of the OCQ was used, where only eight positive item scores are summed and divided by 8 to form a reduced organisational commitment score as suggested by Mowday et al. (1979). The items were scored on a 7-point Likert scale from strongly disagree (1) to strongly agree (7).

Customer profile

To measure customer profile, the distributors were asked to respond to the questions: What percentage of your monthly personal sales are made to friends and family? (2) From your total group sales, what is the share of your personal sales? The responses were scored on a scale of 1-6 (1 = 0-10%; 2 = 11-20%; 3 = 21-30%; 4 = 31-40%; 5 = 41-50%; and 6 = 51%+).

Perceptions of marketing mix

Four items were used to measure the perceptions of marketing mix construct: (1) I am happy with the product range offered by my organisation; (2) The product range addresses the needs of my customers; (3) I am happy with the quality of products offered by my organisation; (4) I am happy with the price of the products in my organisation. The items were measured on a 5-point Likert scale, ranging from ‘strongly disagree’ to ‘strongly agree’, 1 indicating low or negative perceptions of marketing mix and 5 indicating high or positive perception of marketing mix.

Analytical procedure

Structural equation modelling (SEM) is used to determine the simultaneous effect of the five variables in the study: performance, job satisfaction, organisation commitment; customer profile, and perceptions of marketing mix. SEM is also used to determine the causal direction of the job satisfaction/performance relationship. SEM is a confirmatory analytical tool, and its usefulness lies in providing estimates of the strength of all the hypothesised relationships as specified in the model illustrated in Figure 1.

The scores on all items for each variable were aggregated to obtain single dimension scores. The structural model was thus written as a completely endogenous model. This approach to model estimation is advantageous and efficient because only the beta coefficients are estimated and the method does not require exogenous constructs to be nominated (Joreskog & Sorbom, 1996). Furthermore, completely endogenous models have been estimated in a number of studies (refer to Sager & Menon, 1994; Bagozzi, 1980, Mackenzie et al., 1998).

The Komolgorov-Smirnov test was carried out to check the data for any departures from multivariate normality. The variables were found to have significant departure from normality (p<.01) and this was remedied by employing a square root transformation of the variables prior to model estimation. AMOS was used to examine measurement and hypothesised structural models. As recommended by Anderson and Gerbing (1988) the two-step procedure that separately estimates and respecifies the measurement model prior to simultaneous estimation of measurement and structural model was followed. Two nested models were tested, one with job satisfaction as a determinant of performance, and the other with performance as a determinant of job satisfaction as illustrated in the equations below:

**Model A**

\[ y_1 = \beta_3 y_2 + \beta_5 x_3 + \beta_6 x_4 + \beta_8 x_5 + E_1 \]  
\[ y_2 = \beta_6 x_6 + E_2 \]  
\[ y_3 = \beta_7 y_2 + \beta_8 x_6 + E_3 \]  

**Model B**

\[ y_1 = \beta_3 y_3 + \beta_4 x_3 + \beta_5 x_6 + E_1 \]  
\[ y_2 = \beta_6 y_1 + \beta_8 x_2 + E_2 \]  
\[ y_3 = \beta_7 y_2 + \beta_8 x_5 + E_3 \]

Where: \( y_1 \) = performance; \( y_2 \) = job satisfaction; \( y_3 \) = organisational commitment; \( x_1 \) = customer profile; \( x_2 \) = perceptions of marketing mix; \( E_1 \) = error term for equation 1; \( E_2 \) = error term for equation 2 and \( E_3 \) = error term for equation 3; \( \beta_1 \) - \( \beta_8 \) = beta coefficients estimated in the model

**Results**

Assessing the internal consistency of the variables is the requirement in SEM and in theory testing, not only to assign meaning to the parameters that are estimated, but also to assess unidimensionality. Table 1 reports Cronbach alpha coefficients, means, standard deviations (s.d.) and correlation of variables in the model. The internal consistency and unidimensionality of the variables measured by Cronbach’s alpha are within the benchmark of 0.70 as suggested by Nunnaly and Bernstein (1994) and 0.60 for
exploratory research as suggested by Hair, Anderson, Tatham and Black (1998).

Table 1: Descriptive statistics, internal consistency, and correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>s. d.</th>
<th>alpha</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Performance</td>
<td>1,48</td>
<td>0,64</td>
<td>0,60</td>
<td>1,00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Job satisfaction</td>
<td>4,00</td>
<td>0,51</td>
<td>0,73</td>
<td>0,15</td>
<td>1,00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Organisational commitment</td>
<td>6,31</td>
<td>0,94</td>
<td>0,91</td>
<td>0,30</td>
<td>0,54</td>
<td>1,00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Customer profile</td>
<td>2,47</td>
<td>1,44</td>
<td>0,70</td>
<td>0,13</td>
<td>0,11</td>
<td>0,15</td>
<td>1,00</td>
<td></td>
</tr>
<tr>
<td>5. Perceptions of marketing mix</td>
<td>4,40</td>
<td>0,57</td>
<td>0,74</td>
<td>0,19</td>
<td>0,49</td>
<td>0,59</td>
<td>0,20</td>
<td>1,00</td>
</tr>
</tbody>
</table>

The mean scores of the variables indicate that in general the respondents exhibit high job satisfaction, (4.0), high perceptions of marketing mix (4.40), high organisational commitment (6.31), and average performance (1.48). The correlation matrix of the 5 variables was chosen as the data input to use in the structural equation statistical software. According to Arbuckle (1997), the correlation matrix is preferred instead of a covariance matrix if the objective is to explore the pattern of interrelationships. The correlation between variables ranges from .09 to .59 with organisational commitment correlating strongly with job satisfaction (.54) and perceptions of marketing mix (.59).

The model estimation was performed with maximum likelihood estimation. The findings revealed that the job satisfaction/performance path was insignificant. Hypothesis 1 was therefore not supported. Surprisingly, the perceptions of marketing mix/performance path were also insignificant. Hypothesis 5 was thus not supported. The model had to be respecified without the insignificant paths, and the parameter estimates of the revised model are presented in Table 2. Although the parameter estimates for customer profile/performance (β4 = 0.03) and performance/job satisfaction (β2 = -0.02) relationships were less than, or equal to, their corresponding standard errors, the two paths were included in the model to achieve greater model parsimony. This was done in concurrence with Maruyama’s (1998) contention that parameters whose standard errors are larger than their regression estimates may be included in the model to achieve a parsimonious model, especially if the paths are rooted in theory.

Table 2: The parameter estimates for the revised structural model

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Estimates</th>
<th>Standard Error</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2: Performance is positively associated with job satisfaction</td>
<td>β2 = -0,02</td>
<td>0,05</td>
<td>-0,38</td>
</tr>
<tr>
<td>H3: Organisational commitment is positively related to performance</td>
<td>β3 = 0,21</td>
<td>0,04</td>
<td>4,78</td>
</tr>
<tr>
<td>H4: Customer profile is positively associated with performance</td>
<td>β4 = 0,03</td>
<td>0,03</td>
<td>0,88</td>
</tr>
<tr>
<td>H6: Perceptions of marketing mix is positively related to job satisfaction</td>
<td>β6 = 0,44</td>
<td>0,05</td>
<td>8,73</td>
</tr>
<tr>
<td>H7: Job satisfaction is positively associated to organisational commitment</td>
<td>β7 = 0,61</td>
<td>0,10</td>
<td>5,87</td>
</tr>
<tr>
<td>H8: Perceptions of marketing mix is positively associated to organisational commitment</td>
<td>β8 = 0,71</td>
<td>0,09</td>
<td>7,80</td>
</tr>
</tbody>
</table>

As expected the distributors’ organisational commitment increased as job satisfaction increased, thus lending strong support to hypothesis 7 (β7 = 0.61). The results also confirm the relationship between organisational commitment and performance, thus supporting hypothesis 3 (β3 = 0.21). It is interesting to note that there is no direct link between performance and perceptions of marketing mix, instead the relationship between the two variables is mediated by the organisational commitment variable. The results lend strong support for hypothesis 8 (β8 = 0.71). This suggests that the more favourable NWM distributors perceive the marketing mix elements, the more committed they will be to their organisation and the greater will their performance be.

The direction of the performance/job satisfaction relationship was unexpected. Table 2 shows that the two variables are negatively related to each other, indicating that as performance increases, job satisfaction decreases. Performance and job satisfaction are two of the most established variables in traditional sales force management and have been positively linked in a number of studies (Birnbaum & Somers, 1993; Futrell & Parasuraman, 1984; Johnston et al., 1988; MacKenzie et al., 1998). It is quite surprising to find these variables negatively related in the NWM context.

Figure 2 depicts the model that this study is introducing. Organisational commitment has the highest predictive power of the distributor performance (β3 = 0.21) followed by customer profile (β4 = 0.03). Perceptions of marketing mix is the strongest predictor of organisational commitment (β8 = 0.71) compared to job satisfaction (β7 = 0.61). The findings also revealed that there was greater model parsimony when the causal direction of the performance/job satisfaction relationship was from performance to job satisfaction as depicted in Figure 2.
Figure 2: A revised model of distributor performance

Table 3 reports the overall goodness-of-fit measures for the revised model. Fitting the revised model resulted in acceptable goodness-of-fit indices: \( \chi^2 = 10.17, p = 0.04 \), goodness-of-fit index (GFI) = 0.98, normed fit index (NFI) = 0.96, and Tucker-Lewis Index (TLI) = 0.94. The root square error of approximation (RMSEA) is 0.07, and the p-value for test of close fit equals 0.17 which suggests a good fit.

Table 3: Assessment of goodness-of-fit measures for revised model

<table>
<thead>
<tr>
<th>Goodness-of-fit Measures</th>
<th>Revised Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square</td>
<td>10.17</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>4.0</td>
</tr>
<tr>
<td>Significance level</td>
<td>0.4</td>
</tr>
<tr>
<td>Goodness-of-fit index (GFI)</td>
<td>0.98</td>
</tr>
<tr>
<td>Normed fit index (NFI)</td>
<td>0.96</td>
</tr>
<tr>
<td>Tucker-Lewis Index (TLI)</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Discussion and implications

The purpose of this study has been to (1) introduce a model that predicts distributor performance in NWM organisations (2) identify the variables that are most predictive of distributor performance in NWM organisations. The results provide valuable insights into these two questions.

A model that predicts distributor performance in NWM organisations. The findings indicate that there are two variables that impact directly on performance, the organisational commitment and customer profile variables, although the customer profile performance relationship is rather weak. This suggests that the extent to which NWM distributors sell to their social networks determine the level of performance they display. The results also show that organisational commitment is a stronger determinant of performance compared to customer profile. This finding has important implications to the NWM practitioners. Foremost, NWM organisations ought to identify factors that contribute to organisational commitment over and above the factors identified in this study, i.e., job satisfaction and perceptions of marketing. There would be significant gain for the NWM practitioners in identifying various job-satisfaction dimensions and to work at strategies that would enhance job satisfaction. Investing time and money on enhancing job satisfaction would also improve organisational commitment. Furthermore, improving aspects of marketing mix such as product quality and promotion will positively impact on job satisfaction.

The most significant finding is that the direction of the relationship between performance and job satisfaction runs from job satisfaction to performance. Not only does performance determine job satisfaction, but the two variables are negatively associated. The finding implies that as performance increases, job satisfaction decreases. This is contrary to the hypothesis of this study, which postulates that the distributor performance has a positive association with job satisfaction. It is quite clear that a lower level of job satisfaction is the negative outcome of high performance. This is not totally unsurprising given the pressure that NWM distributors work under to achieve their monthly sales targets. NWM sales managers need to reduce the negative outcomes of performance by offering more rewarding incentives that are performance based. Perhaps broadening the performance measure to include organisational citizenship behaviours instead of only focusing on the sales productivity aspect of performance would lessen the pressure that distributors work under, and lead to higher job satisfaction.

The variables that are most predictive of distributor performance in NWM organisations. This study has used structural equation modeling to identify variables that are most predictive of distributor performance. One of the values of structural equation modeling is not only in understanding how well the predictor variables (perceptions of marketing mix, job satisfaction, organisational commitment and customer profile) explain the criterion variable (performance), but in identifying the specific
predictor variables that are most important in predicting. Moreover, structural equation modeling enables the researcher to examine the simultaneous effect of the predictor and criterion variables. This study has found that organisational commitment has the highest predictive power of performance, while perceptions of marketing mix is a better predictor of organisational commitment compared to job satisfaction. Customer profile was found to be a weaker predictor of performance.

Limitations and future research

The findings of this article are subject to some limitations that also suggest avenues for further research. Researchers might wish to identify additional variables that impact on distributor performance. Researchers might also wish to examine a more detailed conceptualisation and measurement of performance that integrates both the in-role and extra-role aspects of performance as suggested by MacKenzie et al. (1998).

Although this study examines the perceptions of the marketing mix, it only focuses at the product, price and quality. Development of a measure that captures all the components of the marketing mix in a NWM context is necessary. Further research could then be usefully directed to testing the model introduced in this study with a psychometrically valid measure of perceptions of marketing mix.

References


role of supervisors’, *Journal of Marketing Research*, May: 263-274.


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