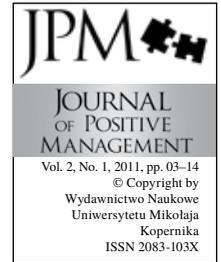


MEMBERSHIP SATISFACTION AND THE COST OF MEMBERSHIP – THE CASE OF DANISH UNEMPLOYMENT INSURANCE FUNDS



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Abstract

This article suggests a framework for measuring membership satisfaction based on a literature study. The framework is tested on data from more than 8800 members from 29 different Danish unemployment insurance funds. The framework fits the data well and is able to explain 83% of the variation in membership satisfaction. Furthermore the cost of administration per member and membership satisfaction is found to be able to explain differences in membership loyalty when the 29 unemployment insurance funds are compared. Finally administration costs per member are found to be dependent on the number of members per employee and affiliation.

Keywords: membership, satisfaction, cost of membership, membership satisfaction, Denmark, Danish Unemployment Insurance Funds

Paper type: Research paper

1. Introduction

In recent years a lot of research has gone into measuring customer satisfaction (Eskildsen et al., 2004a, Eskildsen et al., 2007, Fornell, 1992, Fornell et al., 1996, Johnson et al., 2001, Kristensen and Martensen, 1996, Kristensen et al., 2002a, Eskildsen and Kristensen, 2006, Eskildsen and Kristensen, 2007b) and job satisfaction (Bernhardt et al., 2000, Eskildsen et al., 2004b, Eskildsen et al., 2003, Sousa-Poza and Sousa-Poza, 2000).

A concept that can be said to lie in the intersection between customer satisfaction and job satisfaction is membership satisfaction. Most of the work done within this area deals with union satisfaction that has been research quite a bit over the years (Bamberger et al., 1999, Barling and Wade, 1990, Chacko, 1985, Chan et al., 2006, Charlwood, 2002, Chaulk and Brown, 2008, Fiorito

et al., 1988, Frenkel and Kuruvilla, 1999, Kuruvilla et al., 1993a, Lincoln and Boothe, 1993).

The purpose of this paper is to outline a generic framework for measuring membership satisfaction. Furthermore the authors will try to explain differences in administration costs per member and test whether or not there is a relationship between administration cost per member and membership loyalty.

The data for these analyses comes from more than 8800 members from 29 different Danish unemployment insurance funds.

2. Towards a framework

Most of the previous literature on membership satisfaction deals more specifically with union satisfaction. Conceptualization of union satisfaction has traditionally been based on Locke's (1976) definition of job satisfaction, "a pleasurable and positive emotional state resulting from the appraisal of one's job or job experiences, and (...) a function of the perceived relationship between what one wants from one's job and what one perceives it as offering" (Kuruvilla et al., 1993a).

Locke's definition has subsequently been adopted by Fiorito et al. (1988). They suggest that union satisfaction is a function of the discrepancy between member expectations and perceptions of union performance on a number of job and union-related aspects (Kuruvilla et al., 1993a).

This latter definition suggests that membership satisfaction conceptually lies in the intersection between job and customer satisfaction due to the nature of the relationship between member and the corresponding organization.

The connection to the organization of which a person is a member is not as strong as it is in most job contexts but on the other hand it is stronger than what one would experience in most consumer related interactions. If this suggestion is valid then the literature on union satisfaction and customer satisfaction might provide inspiration for an integrated framework for modeling membership satisfaction.

If we assume that the findings with respect to unions are transferrable to the more general membership situation then we expect to find a positive relationship between organizational commitment and membership satisfaction (Iverson and Kuruvilla, 1995, Snape et al., 2000), as well as perceived organizational reputation and utility of membership (union instrumentality from the union satisfaction literature) (Bamberger et al., 1999, Snape et al., 2000, Sverke and Kuruvilla, 1995).

From the customer satisfaction field we know quite a lot about the antecedents of satisfaction. There are several generic frameworks for modeling customer satisfaction and one of these is the EPSI Rating framework. This framework was created on the basis of the recommendations from a feasibility study and by the work provided by the ECSI Technical Committee (Eskildsen et al., 2004a).

A pilot study was conducted in 1999 and measurements have so far been implemented in a small set of industries in a sample of the European countries. The EPSI Rating framework is a structural equation model. The model stipulates that perceived value, customer satisfaction and customer loyalty are driven by company image, customer expectations, product quality and service quality. Each of these seven variables is seen as latent, i.e. non-observable, variables (Eskildsen et al., 2004a).

Based on the literature on union satisfaction and customer satisfaction our proposed framework for measuring membership satisfaction has the structure shown in Figure 1.

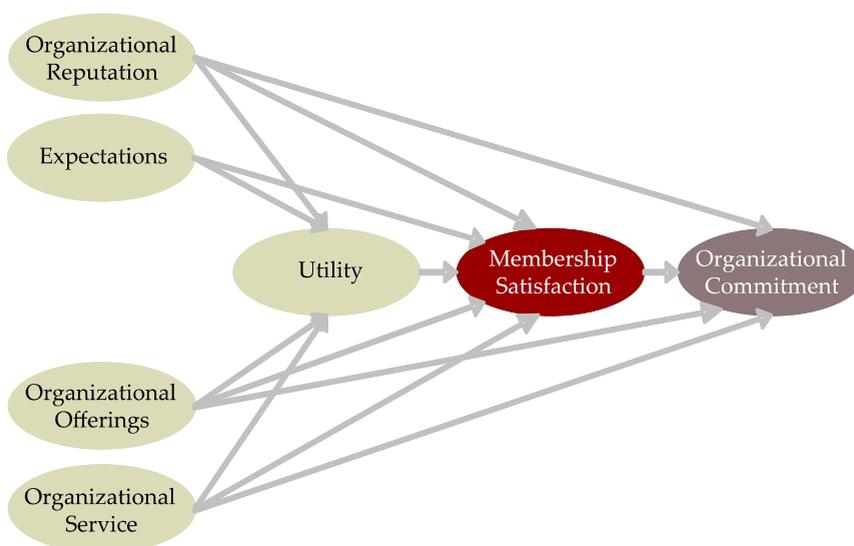


Figure 1.
The Membership
Satisfaction Index

In the following the proposed model will be tested based on a large study conducted among Danish unemployment insurance funds in 2009.

3. Sampling

The data for these analyses comes from a study conducted among the members from 29 different Danish unemployment insurance funds. For each of the unemployment insurance funds a representative group of members were invited to participate. They had all been more or less unemployed in weeks 13–25 2009. A total of 29677 members were invited to participate and 8848 of these members chose to participate giving a response rate of 30%.

The data is slightly skewed with respect to gender and age but not to an extent where it affects the results of the analyses. There is however a very large difference between the unemployment insurance funds with respect to the number of members that have been more or less unemployed in the period. The data has therefore been weighted in order to account for this.

4. Methodology

The Membership Satisfaction Index is estimated with the statistical technique Partial Least Squares (PLS). PLS has been chosen since the focus is on predicting member satisfaction and loyalty and PLS is a technique well suited for this purpose (Jöreskog and Wold, 1982).

Furthermore it is not sensitive to skewed distributions and multicollinearity as other structural equation modeling techniques tend to be (Cassel et al., 1999, Kristensen and Eskildsen, 2010). The PLS model consists of three parts: inner relations, outer relations, and weight relations (Fornell and Cha, 1994, Wold, 1980). The inner relations depict the relations between the latent variables as shown in (1).

$$(1) \quad \boldsymbol{\eta} = \mathbf{B}\boldsymbol{\eta} + \boldsymbol{\Gamma}\boldsymbol{\xi} + \boldsymbol{\zeta}$$

In the inner relations $\boldsymbol{\eta}$ is a vector of the latent endogenous variables and \mathbf{B} the corresponding coefficient matrix (Fornell and Cha, 1994). $\boldsymbol{\xi}$ is a vector of the latent exogenous variables, $\boldsymbol{\Gamma}$ the corresponding coefficient matrix and finally an error term, $\boldsymbol{\zeta}$, is included.

The second part of the model is the outer relations (Fornell and Cha, 1994). This part of the model define the relationship between the latent variables and the manifest variables and in contrast to LISREL these can both be reflective and formative by nature (Jöreskog and Wold, 1982). Since the analysis performed here is based on reflective outer relations only this situation is mentioned in the following. The general formula for reflective outer relations is shown in (2).

$$(2) \quad \begin{aligned} \mathbf{y} &= \boldsymbol{\Lambda}_y \boldsymbol{\eta} + \boldsymbol{\varepsilon}_y \\ \mathbf{x} &= \boldsymbol{\Lambda}_x \boldsymbol{\xi} + \boldsymbol{\varepsilon}_x \end{aligned}$$

Here \mathbf{y} is a vector of the observed indicators of $\boldsymbol{\eta}$ and \mathbf{x} is a vector of the observed indicators of $\boldsymbol{\xi}$. $\boldsymbol{\Lambda}_y$ and $\boldsymbol{\Lambda}_x$ are matrices that contain the λ_i coefficients which link the latent and the manifest variables together and $\boldsymbol{\delta}$ and $\boldsymbol{\varepsilon}$ are the error of measurement for \mathbf{x} and \mathbf{y} , respectively (Fornell and Cha, 1994).

The weight relations are the final part of the PLS model. In PLS each case value of the latent variables can be estimated through the weight relations shown in (3) as linear aggregates of their empirical indicators.

$$(3) \begin{aligned} \hat{\eta} &= \omega_{\eta} y \\ \hat{\xi} &= \omega_{\xi} x \end{aligned}$$

In the following the results of the analyses are reported.

5. Empirical Results

The result of the PLS analysis is shown in Figure 2 below. In this figure the latent variables have been rescaled to 0–100 and the overall satisfaction with the unemployment insurance funds is thus 72. The framework has good prediction ability as it explains 83% of the variation in membership satisfaction.

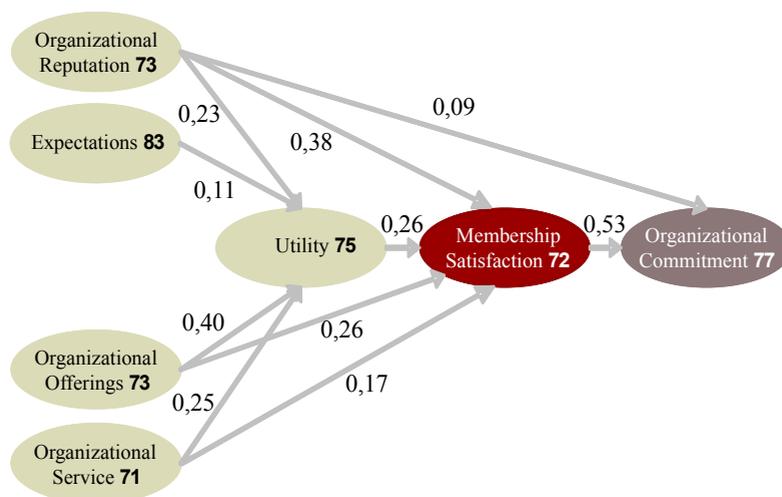


Figure 2.
Empirical model

In order to identify the areas in which the unemployment insurance funds can improve in order to make the members more satisfied an importance-performance map has been constructed. This map is shown in Figure 3.

From Figure 3 it is evident that the unemployment insurance funds have opportunities for improvement with respect to their offerings as well as their reputation. If one looks at the actual statements it is particularly the ability of the organization's to help their members find a new job and all the aspects related to this that should be improved.

There is however a great deal of variation among the 29 unemployment insurance funds (UIF 1 – UIF 29) as shown in Figure 4 below.

As Figure 4 shows the lowest scoring organization has a member satisfaction of 56 and the highest scoring a member satisfaction of 79. This difference is large compared to what one finds in customer satisfaction and job satisfaction studies (Kristensen et al., 2002b, Eskildsen and Kristensen, 2007a).

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Figure 3.
Importance –
Performance Map

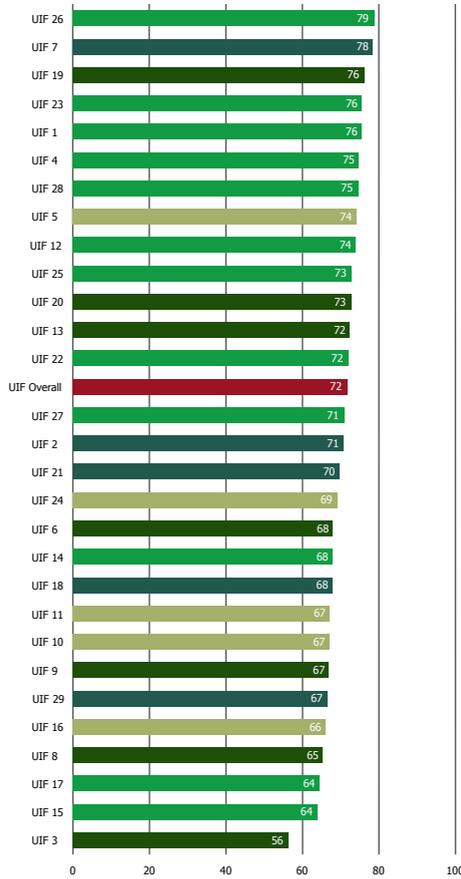
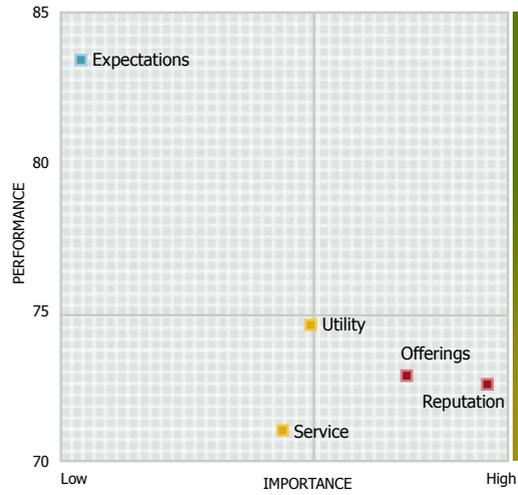


Figure 4.
Satisfaction levels

Based on the satisfaction measurements we have investigated is whether or not there is any relationship between the satisfaction of members and the costs associated with serving them. The actual insurance cost of the unemployment benefit funds is the same and is governed by law. On top of this the unemployment insurance funds collect an additional amount for administering the unemployment benefits. This amount varies among the unemployment insurance funds and is thus dependant on the cost structure of the individual unemployment insurance fund.

Membership satisfaction and the administration cost per member are shown in Figure 4 for all 29 unemployment insurance funds. The numbering of the unemployment insurance funds is the same as in Figure 4.

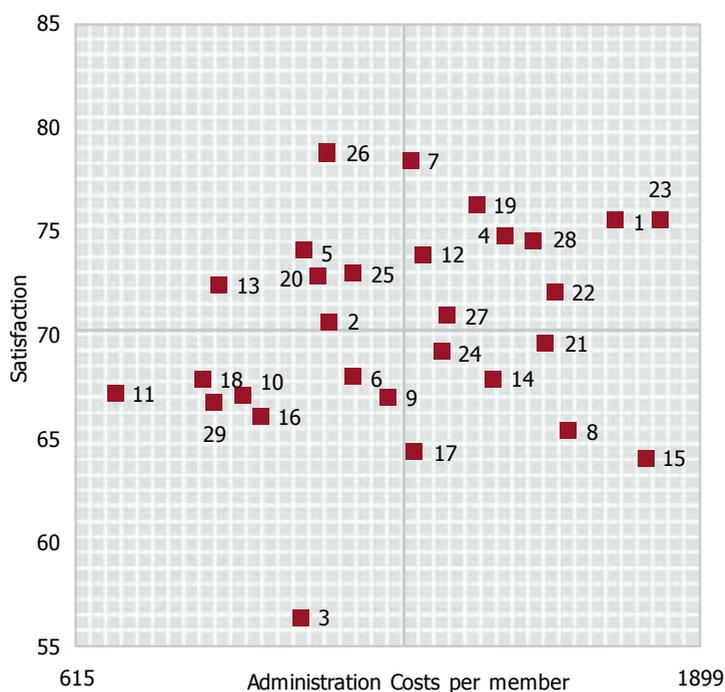


Figure 5.
Satisfaction and
Costs

From Figure 5 it is evident that there is no relationship between the satisfaction of members and the costs associated with serving them. Actually the organization (3) with the least satisfied members has the same cost structure as the organization (26) with the most satisfied members.

The cost structure ought to be directly related to the percentage of unemployed members but several organizations have relatively high administration costs even though the percentage of unemployed members is relatively low.

Although there is no apparent relationship between membership satisfaction and administration costs per member this may not be the case for membership loyalty as well. If one does a regression with loyalty as dependant variable and the antecedents of loyalty and cost of membership as explanatory variables the relationship shown in Table 1 appears:

R ² =0.498	Unstand. coefficients	t – values	Significance
Constant	60.413	5.879	0.000
Satisfaction	0.473	3.166	0.004
Admin costs per member	-0.012	-4.599	0.000

Table 1.
Antecedents of
loyalty

As Table 1 shows only membership satisfaction and the cost of membership are significant when it comes to explaining the differences in membership satisfaction.

The results reported in Table 1 means that if membership satisfaction increases 1 point then membership loyalty increases 0.473 points and if the administration costs per member increases 100 DKK then membership loyalty decreases 1.2 points.

We have now seen that administration costs per member influences membership satisfaction but why do we see these large differences with respect to administration costs per member among the 29 unemployment insurance funds?

Traditionally the 29 unemployment insurance funds have been associated with one or more unions that belong to one of four affiliations shown below:

- LO, the Danish Confederation of Trade Unions
- FTF – Confederation of Professionals in Denmark
- The Danish Confederation of Professional Associations, AC
- Others

We have done a regression analysis to explain the differences in administration costs per member and apart from the affiliation shown above the analysis included:

- Number of members
- Number of members per employee
- Number of offices
- Number of unemployed per employee
- Unemployment percentage

The result of the analyses is shown in Table 2. As this table shows only two of the explanatory variables have a significant effect on administration costs per member. The two variables are members per employee and the dummy variable coding for affiliation with LO, the Danish Confederation of Trade Unions.

R ² =0.657	Unstand. coefficients	t – values	Significance
Constant	1710.107	14.203	0.000
Members per employee	-0.790	-4.990	0.000
LO	193.939	2.659	0.013

Table 2.

Regression results
with Administration
costs per member as
dependent variable

Table 2 shows that there is an efficiency effect since the administration costs per members decrease by 79 DKK whenever the unemployment insurance funds are able to increase the number of members per employee by 100. Apparently quality improvements that increase the efficiency of the unemployment insurance funds tend to benefit the members as well.

The table also shows that the administration of the unemployment insurance funds affiliated with LO, the Danish Confederation of Trade Unions are on average 193.939 DKK more expensive than the rest of the unemployment insurance funds. The reason for this can to some extent be explained by a higher level of activity (a higher unemployment percentage amongst the members) but it does appear as if the unemployment insurance funds affiliated with LO, the Danish Confederation of Trade Unions in general have an undesirable cost structure compared to the other unemployment insurance funds.

6. Concluding remarks

This article has suggested a framework for measuring membership satisfaction based on a literature study. The framework has subsequently been tested on data from more than 8800 members from 29 different Danish unemployment insurance funds. The framework fits the data well and is able to explain 83% of the variation in membership satisfaction.

The unemployment insurance funds have opportunities for improvement with respect to their offerings as well as their reputation. If one looks at the actual statements it is particularly the ability of the organization's to help their members find a new job and all the aspects related to this that should be improved.

Furthermore this article has examined the relationship between administration cost per member and the constructs from the membership satisfaction framework. The analysis showed that the cost of administration per member and membership satisfaction is found to be able to explain differences in membership loyalty when the 29 unemployment insurance funds are compared.

Finally administration costs per member are found to be dependent on the number of members per employee and affiliation. Apparently there is an efficiency effect so that quality improvements that increase the efficiency of the unemployment insurance funds with respect to the number of members per employee tend to benefit the members as well.

The analysis showed that the administration of the unemployment insurance funds affiliated with LO, the Danish Confederation of Trade Unions are on average 193.939 DKK more expensive than the rest of the unemployment insurance funds.

Although this to some extent can be explained it still does appear as if the unemployment insurance funds affiliated with LO, the Danish Confederation of Trade Unions in general have an undesirable cost structure compared to the other unemployment insurance funds.

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