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*The Influence of the “Co-operative Difference” on Job Satisfaction:
A Personalist Humanistic Management Perspective*

Keywords: co-operative bank; job satisfaction; employee participation; humanistic management; personalism

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Abstract

Theoretical background: In contemporary debates on co-operative identity, a concept of “co-operative difference,” understood as the difference between co-operatives and other types of entities resulting from the specific organisational form of co-operatives and the grounding of their activities in co-operative values and principles, is repeatedly mentioned. However, so far there is a lack of research on the impact of the co-operative difference on employee attitudes. This is surprising, as employees are key in sustaining the co-operative identity.

Purpose of the article: The aim of the article is to examine the impact of the “co-operative difference” on job satisfaction. Out of the many variables that can influence the sense of “co-operative difference,” this article focuses on local embeddedness (LE) and employee participation (EP).

Research methods: The research hypotheses formulated on the basis of personalist humanistic management were verified using data on more than 1,400 employees from 42 Polish co-operative banks (CBs) collected in 2017. Using two-level linear regression models, the direct effect and the interaction effect of LE and EP on job satisfaction was examined.

Main findings: Both LE and EP have a positive impact on job satisfaction at CBs. However, the results of interaction between LE and EP are surprising. The impact of LE on satisfaction is, as expected, insignificant for very low EP values and positive for moderate EP values. Nevertheless, when EP takes on high values, the impact is again insignificant. This result could show that employees focus primarily on human resource management practices (like EP) and care less about the local community orientation of their employer.

Introduction

The dynamically changing economic and social circumstances of co-operatives around the world are prompting practitioners and academics to rethink the identity of co-operatives (e.g. International Co-operative Alliance, 2015a; Levi, 2001). They debate, among other things, the feasibility of maintaining the “co-operative spirit” as co-operatives grow into big domestic or even international organisations (Jones & Kalmi, 2012; Puusa et al., 2016) or encounter regulatory environments prompting them to resemble investor-owned firms (Groeneveld, 2017; Novkovic, 2022). The theme of 33rd World Cooperative Congress, “Deepening our Cooperative Identity,” held in 2021, called attention to these debates.

In order to better capture the co-operative identity, scholars and practitioners repeatedly use the concept of “co-operative difference.” It can be broadly defined as the difference between co-operatives and other types of entities. This difference pertains to the specific organisational form of co-operatives as opposed to other types of entities and the grounding of their activities in co-operative values and principles (International Co-operative Alliance, 2015a; Novkovic, 2008).

Unfortunately, as Puusa et al. (2016) observed, not enough research has been conducted investigating the specific characteristics of co-operatives to fully understand how this difference affects co-operative operations. This is particularly discernible in the case of employee-related issues. Studies on human resource management (HRM) in co-operatives are scarce (Marcoux et al., 2021; Voigt & von der Oelsnitz, 2024), a surprising finding given that employees are key in sustaining the co-operative identity (Davis, 2006) and proper HRM practices have an influence on their values and behaviours (Tuan, 2017). Among the few articles that address the topic of HRM is one by Marcoux et al. (2021) who analysed the impact of the “co-operative difference” on affective, normative and calculative commitment. Another article is the study by Piasecki et al. (2022) who examined the impact of the “co-operative difference” on employees’ affective commitment and investigated the role of organisational size as a moderator of this relationship. In addition, Novkovic (2022) proposed a number of indicators to assess the “co-operative difference,” some of which relate to employees; however, her investigation did not include an empirical analysis.

This article seeks to fill the aforementioned research gap. Specifically, the aim of the article is to examine the impact of the “co-operative difference” on job satis-

faction. The choice of job satisfaction is based on the fact that it is a determinant of both willingness to change employer and job performance and, hence, a key employee attitude repeatedly analysed in the literature (see Bowling & Hammond, 2008). Moreover, job satisfaction is linked to employees' identification with the organisation's goals and their willingness to co-operate with others (Rakowska et al., 2017), and these attitudes are crucial for co-operatives as collaborative organisations pursuing specific goals based on co-operative values and principles. Furthermore, given the aforementioned limited research on HRM in co-operatives, it seems reasonable to include well-researched, general attitude in preliminary analyses to address more specific, less recognised attitudes in subsequent studies.

The empirical section of this paper will present the results of the analysis performed on a dataset containing more than 1,400 responses from Polish co-operative banks (CBs). These companies are good examples regarding issues related to "co-operative difference" as they are struggling to maintain their "co-operative spirit" by, among other things, serving low-income clients (Kil & Miklaszewska, 2017) and relying on a relational lending model (Jackowicz et al., 2020). Moreover, although generally focused on local communities (Kurasz, 2025), some of them have grown recently, exposing themselves to a greater risk of losing the local embeddedness that is characteristic of most co-operative financial institutions. Of the 489 CBs operating at the end of 2024 (Urząd Komisji Nadzoru Finansowego, 2025), some had several branches, while others had several dozen. Furthermore, they are experiencing an increased regulatory burden (Dec & Masiukiewicz, 2020), which may lead them on the same path as commercial banks (Groeneveld, 2017). Finally, CBs in Poland are experiencing a steady decline in the number of members (Urząd Komisji Nadzoru Finansowego, 2025), indicating an erosion of their co-operative foundation.

In order to better reflect the specific characteristics of co-operatives, this study adopted humanistic management (HM) as a theoretical basis (Matheson et al., 2021; Pirson & Kimakowitz, 2014; Roszkowska & Melé, 2021). Novkovic and McMahon (2023) showed that HM captures very well the uniqueness of co-operatives. Unfortunately, HM has rarely been used to explain employee satisfaction. An analysis of the articles included in Koon's (2021) review on HM indicates that only two of 160 publications conduct an empirical analysis including satisfaction as a dependent variable (Malloch, 2000; Wagenknecht et al., 2017). This study not only utilises HM as a theoretical tool to explain satisfaction, but given the different ways HM has been interpreted, it narrows the theoretical perspective to personalist humanist management (PHM) as best capturing the essence of HM and fitting the specificity of co-operatives.

The article's contribution to the literature is twofold. First, to date, the humanistic perspective has only occasionally been employed in analyses of management within co-operatives (Novkovic & McMahon, 2023), especially as it pertains to employee satisfaction. Thus, by adopting an HM perspective, the study constitutes an important voice in the discussion on co-operative identity (Novkovic et al., 2022; Puusa

et al., 2016). Second, the article contributes to the growing field of HM. As Koon (2021) highlighted, HM studies have evolved in recent years from a primary focus on philosophical issues to more empirical enquiries. The current study follows this trend by analysing the influence of PHM principles on employee attitudes. Although some practical examples of the positive impact of PHM on employee satisfaction can be found (see Acevedo, 2012), they are rather scarce.

Literature review

HM, PHM and the “co-operative difference”

HM is a relatively new but rapidly developing paradigm in management (Mathe-son et al., 2021; Pirson & Kimakowitz, 2014; Roszkowska & Melé, 2021). In contrast to the economic paradigm, in which the organisation is a bundle of contracts or a profit-generating tool and humans are amoral, engaged in short-term relationships of a transactional nature and focused on maximising their own utility, HM views the organisation as social phenomenon based on employee relationships and a concern for employee dignity and wellbeing (Melé, 2016; Pirson & Kimakowitz, 2014).

However, in practice, HM is understood in very different ways (see Acevedo, 2012; Koon, 2021; Melé, 2016; Wagner-Tsukamoto, 2018). For the sake of clarity, this article adopts a personalist perspective (PHM) as best reflecting the main ideas of HM. This perspective is supported by Wagner-Tsukamoto (2018), who maintains that PHM integrates different approaches implicit within HM. In addition, Koon’s (2021) analysis of the HM literature shows that, as a philosophy and foundation for management, humanism is based on personalism. Finally, Acevedo (2012) makes the strongpoint that a “true humanistic management *is* personalistic” by definition. The grounds for adopting a personalist perspective of HM are thus solid. Nevertheless, to be certain that PHM is an appropriate theoretical framework for analysing the “co-operative difference,” we compare it below with the model recently proposed by Novkovic and McMahon (2023), which describes a number of characteristics of a member-owned firm that differentiate it from an investor-owned firm. We also consider whether the PHM is consistent with co-operative principles formulated by International Co-operative Alliance (2015b).

First, both PHM and the model proposed by Novkovic and McMahon (2023) maintain that human beings have intrinsic dignity, are driven by various motives not confined to utility maximisation and take into account ethical elements in the decision-making process (see, for example, Melé, 2016). In the latter model, the complex nature of human beings means that the organisations they create (such as co-operatives) also have a dual (or complex) nature with both individualistic and collective dimensions (Novkovic & McMahon, 2023). Similarly, in PHM, the company is seen as a “community of persons” (Melé, 2012), which means that it is a collective

in which each member retains its individuality. These premises align with the 1st Co-operative Principle (*Voluntary and Open Membership*), which emphasises the voluntary nature of membership as based on the individuality or dignity of human persons (International Co-operative Alliance, 2015b).

Second, both perspectives emphasise that the company exists not only to generate profits for its owners, but also to meet various other goals, such as producing goods and services in a fair way so as to contribute to the common good of society (Melé, 2016). They also emphasise the long-term orientation of the company. Although the model of Novkovic and McMahon (2023) directs more attention to the role of indivisible reserves that mitigate risk, whereas PHM links the long-term orientation to relationships between employees (Melé, 2012), they both express a concern for the resilience and sustainability of the organisation, which is also important to society. Their broad emphasis thus aligns with the 7th Co-operative Principle (*Concern for Community*), which focuses on the interests of the community (International Co-operative Alliance, 2015b).

Finally, both the model of Novkovic and McMahon (2023) and PHM acknowledge the importance of considering the opinions of various groups of stakeholders in the decision-making process. This principle aligns with the 2nd Co-operative Principle (*Democratic Member Control*), which acknowledges the need to hear the voice not only of the members but also of the co-operative's employees (International Co-operative Alliance, 2015b).

While both PHM and the model of Novkovic and McMahon (2023) thus align with the International Co-operative Principles, they are differentiated by two elements. First, PHM is a broader perspective, encompassing different types of organisations (not only co-operatives) and also addressing the person-society relationship (Melé, 2016). Additionally, in PHM, the decisions made in companies prioritise the common good over the interests of individual stakeholders (Melé, 2012). By contrast, the humanistic member-owned firm model emphasises the interests of the members, even though the higher purpose of the co-operative's existence directs these interests. These differences notwithstanding, the above analysis indicates that PHM provides an appropriate theoretical basis for analysing the “co-operative difference” as it shares most elements of the humanistic member-owned firm model and aligns with the co-operative principles formulated by International Co-operative Alliance (2015b). We therefore assume that the more a co-operative operates in accordance with the principles of PHM, the better it implements co-operative principles, and its operating model differs from that of an investor-owned firm, leading to a stronger sense of the “co-operative difference” among its stakeholders.

The impact of the “co-operative difference” on employee satisfaction

There are many properties of the co-operative that could serve as indicators signalling the implementation of PHM principles. In this article, two of these characteristics will be highlighted: the local embeddedness (LE) of the company's activity

and employee participation (EP). We chose them because they are linked to the co-operative principles that constitute the “co-operative difference” (2nd and 7th Co-operative Principle – International Co-operative Alliance, 2015b). Below, we discuss the impact of each of these factors on job satisfaction in the light of PHM.

In general, LE can be defined most simply as a company’s local environmental links with its suppliers, customers and other partners (Andersson et al., 2005; Newbury, 2001). In the case of co-operatives, however, LE tends to denote not only the strength or extent of the relationship with local stakeholders, but also an attitude of care toward those stakeholders and a willingness to take active steps on their behalf (International Co-operative Alliance, 2015b).

LE affects various attitudes of individual employees. For example, Newbury (2001) shows how LE influences employees’ perception of their career opportunities. Similarly, Piasecki (2021) demonstrates a correlation between LE and the intensity of training attended by employees. From the perspective of PHM, an organisation that cares for the local community will increase feelings of employee satisfaction by giving them a positive impression that the company as a smaller community contributes to the common good of the larger community in which it operates (Melé, 2012). However, this effect will only take place if employees feel at least some interest in local community affairs. This condition is most certainly fulfilled in the case of co-operatives, including CBs, as their employees are often recruited from the local labour market and feel the impact of their employer in their daily lives (Bossler & Schild, 2016; Voigt & von der Oelsnitz, 2024).

In the case of Polish CBs, local ties maintained for decades by staff and members are a feature of the sector as a whole (Piasecki, 2021). However, the last several years or so have seen a certain erosion of the local social networks maintained by CB representatives, one symptom being the declining number of Polish CB members (Urząd Komisji Nadzoru Finansowego, 2025). This trend toward weaker networks is probably due to increasing competition, greater emphasis on operational efficiency and the need to adapt to new technologies (Balina et al., 2014). Regardless of the cause, the result will likely be varying degrees of perceived LE among CB employees. In line with the arguments presented above, it can be assumed that those who are more convinced of their bank’s concern for the local community will feel the “co-operative difference” more strongly and hence be more satisfied with their work. This inference leads to the first research hypothesis:

H1. The local embeddedness of the CB correlates positively with employee satisfaction.

From the perspective of PHM, a company should be a “community of persons” (Melé, 2012) oriented toward the development of human virtues and human flourishing as indicated by the provision of goods and services produced for the common good (Acevedo, 2012). To achieve this goal, PHM advocates the inclusion of employees in the process of decision making and thus shared responsibility for the future of the company (Acevedo, 2012; Latemore et al., 2020; Melé, 2012). PHM

also supports the autonomy of employees since being able to decide about one's own work environment with at least partial independence is an affirmation of human dignity (Latimore et al., 2020). Another element of HRM¹ that reflects the assumptions of PHM is open communication with employees since such honesty, which provides each member of the organisation with a knowledge of the whole, is also an affirmation of their dignity (Melé, 2012). These HRM practices – participation in decision-making, employee autonomy, open communication – are often considered components of a broadly defined EP (Mowbray et al., 2015; Tran & Pham, 2019; Uribetxebarria et al., 2021). They facilitate healthy relations with employees, who feel they are being treated not as objects but as subjects and respond by manifesting a positive attitude toward work within the organisation (Pirson & Kimakowitz, 2014). The article by Arnaud and Wasieleski (2014) is a (rare) example of a study considering EP-job satisfaction link from PHM perspective, although in general there are many publications describing this relationship in other streams of research (see, for example, Mowbray et al., 2015; Wikhamn et al., 2022). Additionally, in the case of co-operatives, allowing employees to express their opinions is an implementation of the 2nd Co-operative Principle (International Co-operative Alliance, 2015b) and should therefore lead to greater conviction about the “co-operative difference” among employees (Voigt & von der Oelsnitz, 2024), in turn, resulting in higher satisfaction.

In the context of Polish CBs, it seems that EP is currently being used only to a limited extent. For example, Ławrynowicz and Piasecki (2015) pointed out that the management of Polish CBs do little to “listen” to the voice of employees. Also in Kowalewski's (2021) study, it was found that satisfaction with internal communication and decision-making opportunities at the surveyed bank was at a fairly low level. This is unfortunate as clear, two-way communication that enables young employees who are new to the co-operative banking sector to express their needs is a key element in building a positive attitude towards the employer (Annusewicz & Radkiewicz, 2019). Given the above arguments that EP contributes to the “co-operative difference” which presumably leads to higher job satisfaction, the following hypothesis is formulated:

H2. Employee participation is positively correlated with job satisfaction.

According to the model of Novkovic and McMahon (2023), the more that humanistic member-owned firm characteristics can be attributed to a co-operative, the more strongly its employees should feel the “co-operative difference.” Similarly, some researchers hypothesise that increasing (P)HM-compliant practices has a proportionally stronger impact on employee attitudes (see, for example, Arnaud & Wasieleski, 2014; Malloch, 2000). This means that the simultaneous use of several

¹ Although the term “human resources” is often criticised in HM as impoverishing the concept of the human person (see Acevedo, 2012; Latimore et al., 2020; Pirson & Kimakowitz, 2014), the term “human resource management” (HRM) is nevertheless employed (e.g. Arnaud & Wasieleski, 2014; Koon, 2021; Latimore et al., 2020) presumably because it contributes to terminological consistency and clarity of communication. This approach is also adopted in this article.

management practices that are in line with PHM should elicit more robust responses from employees than the use of a single practice of this type. This relationship can be explained by visibility, which refers to the degree to which HRM practices can be clearly observed by employees (Bowen & Ostroff, 2004). As Bowen and Ostroff (2004) highlight, visibility is a characteristic of a strong HRM system that enables clear communication of employer expectations to employees.

Employees can easily discern whether the organisation practices open communication and grants them a high level of autonomy since these practices have implications for their everyday work experience; the activity of the organisation in the local community, however, may be more opaque. Nevertheless, given the fact that most Polish CBs are small entities (Urząd Komisji Nadzoru Finansowego, 2025) and employees, as mentioned earlier, are often recruited from the areas in which CBs operate, it seems that most employees in this environment should be able to assess fairly easily the extent to which their employer takes an interest in local community issues. It follows that both activities of management boards (impact on the local community building LE and management practices shaping EP) should be relatively equally visible to employees. Thus, employees who perceive the simultaneous presence of both organisational characteristics that mark the application of PHM principles (i.e. high LE and EP) should display a stronger belief in the “co-operative difference” and, consequently, higher satisfaction than those who feel that only one of these characteristics applies to their employer. Therefore, we formulate a third hypothesis:

H3. The positive correlation between local embeddedness and employee satisfaction is stronger for high levels of employee participation than for its lower levels.

Research methods

Sample

Verification of the research hypotheses was conducted using a database that is a result of a 2017 nationwide project aimed at investigating HRM in Polish CBs. This project covered all CBs which were active at the time of the survey (more than 550 banks). Each bank received an invitation to participate in the survey via e-mail. In addition, the invitation was announced at the annual meeting of CB managers and also disseminated by two affiliating banks. Taken together, at the end of 2017 these affiliating banks associated all but two CBs (Urząd Komisji Nadzoru Finansowego, 2018). Questionnaires on general HR issues, statistical data and internal banking policy were sent to each bank that declared participation in the survey along with a link to the employee on-line questionnaire. This link was then distributed among employees by a bank representative (usually an HR specialist). Employees who preferred the paper version received a response sheet with exactly the same content as the on-line version. This resulted in responses from 43 CBs, representing 8% of the

banks operating at the end of 2017. In total, 1,707 employee responses were collected. The resulting sample consisted predominantly of women (79%) and non-managerial staff (76%). Furthermore, the majority of staff (62%) came from large co-operative banks (100 employees or more) (see Table 1).

Measures

The dependent variable, job satisfaction, was measured as a mean of three items taken from Michigan Organisational Assessment Questionnaire Job Satisfaction Subscale (Bowling & Hammond, 2008) and calculated on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). Cronbach's α was 0.763.

LE of the co-operative was measured from the perspective of employees, as their perceptions (not management intentions) ultimately influence attitudes towards the employer (Makhecha et al., 2018). We used one question derived from Ławrynowicz (2013) that asked employees to divide 100 points among three statements in order to describe the situation that was closest to what they observed in their bank. The first statement, "The way in which my CB operates is oriented towards delivering suitable banking services to the local community," described the CBs orientation toward the local community (i.e. LE); the second statement, "Decisions made in my CB result from the situation in the banking market and the desire for maximum efficiency," described the CBs orientation towards maximising efficiency; and the third statement, "The management of my CB is dominated by banking law and Polish Financial Supervision Authority requirements," described its orientation towards meeting regulatory requirements. Note that by assigning a higher percentage to the first statement, the respondents had to reduce the total share of the other two. Therefore, this question essentially measured the amount of "co-operative difference."

To measure EP, this study employed three variables which have often been used in previous research: 1) autonomy, 2) communication, and 3) participation in strategy-related decision making (e.g. Mowbray et al., 2015; Tran & Pham, 2019; Uribechebarria et al., 2021; Wikhamn et al., 2022). They were measured by the following statements: "I have discretion in deciding how to do work in my position" (autonomy); "I am informed about the bank's situation and its performance through regular meetings, discussions with supervisors or other communication channels (e.g. intranet)" (communication); and "My supervisor takes my opinion into account when making decisions related to the functioning of the bank or its branch (e.g. introducing a new product or implementing a change of procedure/reporting method)" (participation in strategy-related decision-making). All EP items were measured on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*).

To verify that these items form one scale as predicted, the study performed principal components analysis (PCA). The initial analysis revealed that the data are appropriate for PCA (the Kaiser–Meyer–Olkin criterion: 0.635, the Bartlett's test of sphericity: $p < 0.001$). The first factor accounted for 59% of the overall variance

with an eigenvalue of 1.77. Moreover, the inspection of the scree plot suggested that a solution with one factor should be chosen (Sarstedt & Mooi, 2019). Cronbach's α for these three statements was 0.647, but the communalities' values were above the 0.50 threshold (between 0.538 and 0.672). Therefore, the results of PCA were used to calculate an EP indicator using the regression method (Sarstedt & Mooi, 2019). The mean of the new variable was 0, while the standard deviation was 1.

Following Bernerth and Aguinis's (2016) recommendations, a number of control variables were introduced that might influence the perception of "co-operative difference," given the theoretical approach adopted in this paper (i.e. PHM). First, we introduced the position of the employee (0 = *non-managerial*, 1 = *managerial*). Employees in managerial positions perform a different role in building organisational community and influencing others from that of non-managerial employees; therefore, from the perspective of PHM, higher expectations in terms of intellectual and moral virtues are placed on them (Acevedo, 2012). It follows that managers may perceive organisational practices differently from their subordinates and manifest different level of satisfaction (Voigt & von der Oelsnitz, 2024). The second control variable was tenure (1 = *less than 1 year*, 2 = *1–3 years*, 3 = *4–9 years*, 4 = *10–19 years*, 5 = *20 years or more*). Employees need time to build relationships in the company community (Melé, 2012); hence their attitudes may change over the years due to practices experienced, such as EP. As the impact of tenure on satisfaction may be non-linear (Boswell et al., 2009), we used intervals of varying widths, as other authors have done (e.g. Ohana, 2014). The third control variable was gender (0 = *man*, 1 = *woman*) as women and men may differ in their expectations of the workplace and job satisfaction (Clark, 1997). The final control variable was the size of the organisation, measured with the threshold set at 100 employees (0 = *less than 100 employees*, 1 = *100 or more employees*) in alignment with earlier studies (see Fabi et al., 2007). As Melé (2012) mentioned, building community in line with PHM may look different in smaller and larger companies as the teams or departments in the latter tend to form small communities that are linked to the larger community of the whole organisation. Moreover, many studies point to problems in sustaining the mission and "co-operative difference" within co-operative financial institutions that are growing (e.g. Hartz et al., 2023).

Analysis

In order to verify the research hypotheses, the study employed several two-level linear regression models with maximum likelihood estimation in Stata 17.0. The results of the initial check of the two-level structure of the data suggested that multilevel modelling (MLM) is justified (likelihood ratio test statistic for job satisfaction = 62.40, $p < 0.001$, ICC = 0.09 – Leckie, 2010). Before performing the calculations, however, we inspected the data structure and made decisions regarding the centring of variables.

In general, it is recommended to apply group-mean centring for first level predictors before performing MLM (Aguinis et al., 2013). However, Aguinis et al. (2013)

argued that such an adjustment alters the interpretation of the results and hence should be justified theoretically. Moreover, it is acceptable to use variables without centring when their 0 value has a meaning. In our case, as the variable describing the perceived LE can take values from 0 (no orientation to the local community at all) to 100 (no orientation to performance and no focus on regulation), leaving the variable without centring is justified. In addition, the variable describing EP is already grand-mean centred (i.e. a value of 0 represents the mean for all observations) as a result of PCA, which seems appropriate as employees usually assess their level of participation on an overall scale (i.e. from very low to very high) and not to the mean level of participation occurring in their organisation (which would be the case with a centred variable). For this reason, following the advice of Aguinis et al. (2013), we did not centre either of the two mentioned variables. However, to check the stability of the results, we also carried out additional analyses in which both variables were group-mean centred (see “Robustness check”).

Results

Descriptive statistics

Table 1 contains means, standard deviations and correlations among study variables. As expected, perceived LE and EP correlate positively with job satisfaction, but the correlation is much stronger for EP. Moreover, perceived LE and EP virtually do not correlate with each other. Note also that the average for perceived LE is around one-third of the scale, indicating that employees do not perceive their CBs as being strongly embedded in the local community.

Table 1. Means, standard deviations and correlations among the study variables

Variable	M	SD	1	2	3	4	5	6
1. Job satisfaction	3.77	0.66						
2. Gender	0.79	0.41	0.037					
3. Position	0.24	0.43	0.131**	-0.181**				
4. Organisational tenure	3.44	1.15	0.064*	0.092**	0.175**			
5. Company size	0.62	0.49	-0.143**	-0.017	-0.029	0.022		
6. Perceived local embeddedness	32.83	16.23	0.134**	0.069**	-0.078**	-0.066*	-0.121**	
7. Employee participation	0.01	1.01	0.463**	-0.061*	0.208**	-0.015	-0.043	0.053*

N = 1,452 (only observations without any missing data were included in the correlation analysis)
** *p* < 0.01; * *p* < 0.05
M – Mean, *SD* – standard deviation; *Dummy coded*: Gender, 0 = man, 1 = woman; Position, 0 = non-manual, 1 = managerial; Company size, 0 = less than 100 employees, 1 = 100 or more employees; *Category coded*: Organisational tenure, 1 = less than 1 year, 2 = 1–3 years, 3 = 4–9 years, 4 = 10–19 years, 5 = 20 years or more; *Continuous variables*: Job satisfaction (min. 1, max. 5), Perceived local embeddedness (min. 0, max. 100), Employee participation (min. -3.1, max. 2.2)
Source: Author’s own study.

Multilevel modelling

Table 2 presents the results of MLM. Model 1 includes only control variables, while Models 2 and 3 demonstrate the results of analyses that also include perceived LE and EP. Finally, Model 4 displays the interaction between these two variables. For Models 2 and 3, we examined whether the impact of LE and EP on satisfaction varied or was similar across CBs. The results of a likelihood ratio test reveal that the impact of LE is similar in each bank (Likelihood-ratio test statistic: 0.05, $p = 0.976$), whereas the effect of EP differs among the analysed organisations (Likelihood-ratio test statistic: 9.35, $p = 0.009$). For this reason, Model 2 was considered to be a random intercept model and both models containing EP (Models 3 and 4), random slope models (Leckie, 2010).

Table 2. MLM results (non-centred variables)

Variable	1	2	3	4
Gender	0.078 (0.060)	0.074 (0.076)	0.086 (0.022)	0.085 (0.023)
Position	0.202 (0.000)	0.215 (0.000)	0.074 (0.044)	0.074 (0.045)
Organisational tenure (1–3 years)	-0.099 (0.185)	-0.099 (0.189)	-0.086 (0.203)	-0.088 (0.196)
Organisational tenure (4–9 years)	-0.145 (0.031)	-0.128 (0.060)	-0.081 (0.186)	-0.083 (0.177)
Organisational tenure (10–19 years)	-0.106 (0.106)	-0.091 (0.172)	-0.033 (0.576)	-0.035 (0.558)
Organisational tenure (20 years and more)	0.053 (0.456)	0.065 (0.367)	0.095 (0.141)	0.095 (0.142)
Company size	-0.190 (0.002)	-0.183 (0.002)	-0.142 (0.001)	-0.144 (0.001)
Perceived local embeddedness		0.005 (0.000)	0.004 (0.000)	0.004 (0.000)
Employee participation			0.277 (0.000)	0.295 (0.000)
Perceived loc. emb.* Employee participation				-0.001 (0.526)
Intercept	3.839 (0.000)	3.677 (0.000)	3.667 (0.000)	3.671 (0.000)
Intercept variance	0.022	0.018	0.008	0.008
Slope variance			0.007	0.007
Covariance between random intercepts and slopes			-0.004	-0.004
Within-company between-employee variance	0.393	0.389	0.310	0.310
Number of observations	1,506	1,464	1,452	1,452
Log likelihood	-1453.453	-1404.572	-1230.862	-1230.661

Number of organisations in each model: 42

Description of the variables provided in the text, p -value in parentheses

Source: Author's own study.

As expected, perceived LE and EP increase job satisfaction (Models 2 and 3). Thus, hypotheses H1 and H2 were both confirmed. By contrast, the interaction term between both variables was insignificant (Model 4). However, before concluding that no interaction occurred, we made additional calculations following the recommendations of Kingsley et al. (2017). Specifically, we conducted a marginal effects analysis for representative moderator values (minimum, -2 standard deviation, -1 standard deviation, mean, +1 standard deviation, +2 standard deviation and maximum) and then visualised the results on a graph, similar to the approach of Williams (2012).

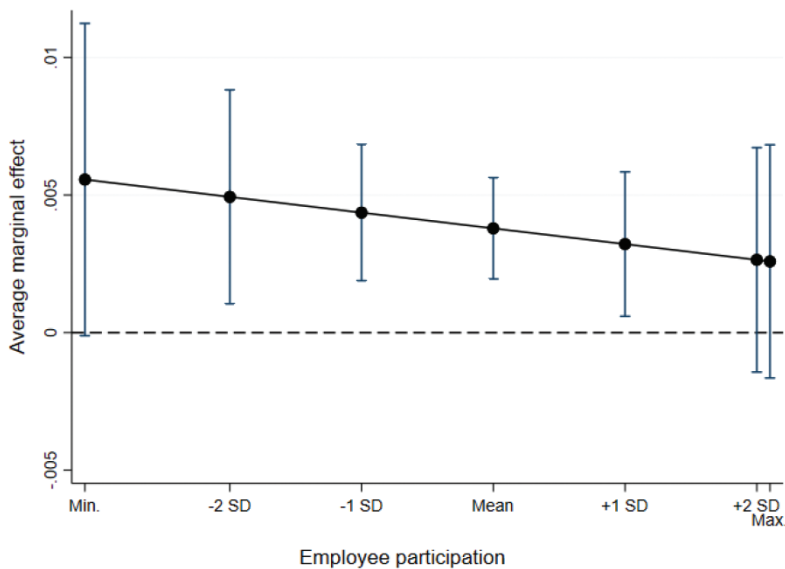


Figure 1. Average marginal effect of perceived local embeddedness for different values of employee participation (both variables not centred)

The figure refers to Model 4 in Table 2. The dashed line shows a value of 0. The bars next to each value indicate the 95% confidence intervals. *Min.* – minimum value, *SD* – standard deviation, *Max.* – maximum value

Source: Author’s own study.

The result presented in Figure 1 illustrates an interesting relationship. For very low (around the minimum) and high (above 1 standard deviation) values of EP, the confidence intervals for marginal effect of LE include 0. This means that the marginal effect of LE on job satisfaction is statistically insignificant for these values of EP. Thus, some kind of interaction between the analysed variables does indeed take place (Kingsley et al., 2017). In other words, when an employee feels that they have no opportunity to express themselves, or when they have a lot of such opportunities, the LE of the bank has no impact on their satisfaction. A positive relationship with satisfaction is only evident at moderate levels of EP. This means that hypothesis H3 was not confirmed.

Robustness check

As a robustness check, additional analyses were performed with a more sophisticated model for LE (i.e. random slope model; see Model 1 in Table S1 in Supplementary material) and less sophisticated model for EP (i.e. random intercept model; see Model 2 in Table S1). In this way, it was verified whether the way in which independent variables affect job satisfaction (uniform in all CBs for LE and differentiated for EP) applied in the analyses has an impact on the results obtained. Moreover, models containing centred variables (see models in Table S2 in Supplementary material and Figure S1) were also examined to verify the effect of our decision to not centre the independent variables (see “Analysis”). Results were generally the same as those previously presented.

Discussion

This study analysed the influence of a company’s LE and EP on job satisfaction in co-operatives. It was hypothesised that when a co-operative develops LE and EP, it operates in line with PHM, which, in turn, reinforces employees’ belief in the “co-operative difference” and increases their satisfaction. The results of the analysis conducted on data from Polish CBs confirmed these positive relationships. The significant positive effect of LE on satisfaction aligns with the assumption of previous analyses that LE plays an important role in co-operative financial institutions (e.g. Jackowicz et al., 2020). As Piasecki et al. (2022) explained, employees perceive management’s concern for the local community and show more positive attitudes towards their employer in appreciation for management’s efforts. In the case of EP, the results are also in line with previous studies (see, for example, Mowbray et al., 2015; Wikhamn et al., 2022) indicating that CB employees are sensitive to, among other things, autonomy and communication in the workplace. Although an analysis of one CB by Kowalewski (2021) identified low employee interest in the quality of communication and the ability to influence decisions, the study of Annusewicz and Radkiewicz (2019) indicated that, at least for young CBs employees, these elements of EP are important. The results of this study support the latter finding.

However, the results of the analysis for LE and EP interaction do not support the hypothesis formulated on the basis of PHM. Although for moderate EP values, the influence of LE on satisfaction is positive – in accordance with PHM – for very low or high levels of EP, the relationship is statistically insignificant. This may indicate that employees are focusing primarily on their needs (e.g. influencing decisions made at work) and caring less about the local community orientation of their employer. The latter finding is in line with the results of Piasecki et al. (2022) who, studying UK building societies, concluded that HRM practices oriented towards co-operative values and principles (which included EP) are more effective in eliciting positive attitudes among

employees towards their employer than a general sense of “co-operative difference” (which derives from a number of factors, including HRM practices and LE). It seems, therefore, that employees do not fully respond to the organisation’s actions as PHM suggests (e.g. Acevedo, 2012). However, it is worth emphasising that the impact of EP on job satisfaction varied among individual CBs. Thus, it is likely that many different organisational characteristics have an influence on this impact. (This is discussed later in the limitations section.)

Conclusions

Theoretical contribution

This study contributes to the ongoing discussion about co-operative identity (Novkovic et al., 2022; Puusa et al., 2016) by considering the role of the “co-operative difference” as viewed from the perspective of PHM. To date, research on employee-related issues in co-operatives is limited (Marcoux et al., 2021; Voigt & von der Oelsnitz, 2024), with minimal attention having been given to the impact of the “co-operative difference” on employee attitudes. This study tested the influence of two factors, EP and LE, that tend to differentiate CBs from non-co-operative financial institutions, and proved that both have an important role in explaining employee satisfaction.

The study also constitutes an important step in the development of HM research. Although many valuable theoretical articles considering HM have been produced, few studies have empirically verified the effects of implementing HM principles, particularly in relation to job satisfaction (Koon, 2021). The results of this study suggest that even though PHM principles are generally valid in predicting job satisfaction, employees are more concerned about management practices that affect them directly (such as EP) than about the organisation’s external, community-based efforts. This finding is an important starting point for further research in HM.

Limitations and future research directions

One set of limitations in this study relates to the measures of variables. First, we analysed only two factors affecting job satisfaction, whereas co-operatives have other characteristics that could contribute to employees’ perception of the “co-operative difference.” These may include the long-term (even intergenerational) orientation of the company or the strategy of member relationship management (Novkovic & McMahon, 2023). Other HRM practices suggested by PHM could also be taken into account, such as providing support for workers in need by, for example, helping to resolve work-family balance issues (Melé, 2012) or establishing leadership development programs oriented towards encouraging autonomy-supportive leadership

(Latemore et al., 2020). Second, there was no variable directly describing the “co-operative difference” in the database (as, for example, in Marcoux et al., 2021, Piasecki et al., 2022). For this reason, we cannot estimate the extent to which the impact of EP and LE on job satisfaction is due to the “co-operative difference.” In subsequent studies, it would be ideal to test by using path analysis, for example, a model in which EP, LE and other variables influence satisfaction through the “co-operative difference” as a mediator variable. Furthermore, comparing the impact of similar factors in co-operatives and non-co-operative entities would allow for verification of the universality of PHM principles, which by definition go beyond the boundaries of a single organisational form (i.e. they should apply not only in co-operatives). Third, when considering the assumptions of PHM, especially the wholeness of the human person (e.g. Acevedo, 2012), job satisfaction is a simplified and limited measure of the consequences of implementing person-centred management practices. As Acevedo (2012) highlighted, employee feelings (such as job satisfaction) cannot be the ultimate criterion of management evaluation nor the primary justification for implementing particular HRM practices. Therefore, future studies should consider several employee-level outcomes simultaneously to capture a greater range of PHM effects (e.g. the development of intellectual and moral virtues) in co-operatives.

The second set of limitations is related to our method of analysis. First, we do not know what PHM actions were taken by the management of the examined CBs. Since the discrepancies between intended, actual and perceived HRM practices can be very large in practice (Makhecha et al., 2018), subsequent studies might include the management practices of branch managers, which can shape EP and thereby influence employee satisfaction. Moreover, the risk of common method bias (CMB) cannot be ruled out since the same respondents answered questions on both the independent variables and job satisfaction. However, several steps were undertaken to reduce this risk, including consulting representatives of two sectoral institutions to help minimise the ambiguity of the statements, separating the measurements of the independent and dependent variables in the questionnaire and assuring respondents that their responses were anonymous (Kock et al., 2021). However, in future studies it would be worthwhile to consider a temporal separation of the measurement of independent and dependent variables.

The third limitation is that the analysis was based on data from 2017. Since then, the situation of Polish CBs has changed – the number of banks and their employees has decreased, while financial indicators have improved significantly (Lepczyński et al., 2025). On the other hand, the average number of employees per bank in 2025 (55.3 full-time positions) is similar to that in 2017 (56.3 full-time positions) (Urząd Komisji Nadzoru Finansowego, 2018, 2025). Furthermore, the co-operative values and principles that constitute the “co-operative difference” have not changed and, at least in theory, should form the basis for the way CBs operate. Thus, we can state that the conclusions drawn from the analysis can form the basis for practical suggestions (see below), provided that they are verified using current data.

Practical implications

There are at least two main practical implications emerging from this study. First, employees responded positively to perceived LE and EP (as expressed, for example, in decision-making participation or open communication). The managements of CBs, despite competitive and regulatory pressures, should therefore strive to maintain the local character of Polish co-operative banking which does not exclude, of course, the development of modern technologies and concern for operational efficiency. In addition, involving employees in their decision-making processes is also necessary. Since employees often live in the bank's area of operation (Bossler & Schild, 2016; Voigt & von der Oelsnitz, 2024), they can become excellent promoters of their employer's values if they are involved in these processes.

Second, the article points to the need for an in-depth investigation of the “co-operative difference” in Polish CBs. The results of analysis suggest that HRM practices have a greater impact on employee satisfaction than the extent of employer involvement in the local community. It would therefore be worthwhile to examine the degree to which employees actually feel there is a difference in working in CBs as compared to non-co-operative financial institutions and how much of this difference is due to the maintenance of PHM principles and the alignment of various management practices that formulate a clear message for employees (Bowen & Ostroff, 2004). Such an analysis would make it possible to create an action plan aimed at increasing employees' perceptions of the uniqueness of their workplace and, in the long term, one that facilitates their flourishing within it.

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Supplementary material

Table S1. MLM results (non-centred variables)

Variable	1	2
Sex	0.074	0.093
	(0.077)	(0.014)
Position	0.215	0.071
	(0.000)	(0.057)
Organisational tenure (1–3 years)	-0.098	-0.083
	(0.193)	(0.225)
Organisational tenure (4–9 years)	-0.126	-0.076
	(0.063)	(0.219)
Organisational tenure (10–19 years)	-0.090	-0.029
	(0.178)	(0.634)
Organisational tenure (20 years and more)	0.066	0.110
	(0.360)	(0.092)
Company size	-0.181	-0.166
	(0.002)	(0.000)
Perceived local embeddedness	0.005	0.004
	(0.000)	(0.000)
Employee participation		0.287
		(0.000)
Intercept	3.676	3.667
	(0.000)	(0.000)
Intercept variance	0.015	0.007
Slope variance	0.000	
Covariance between random intercepts and slopes	0.000	
Within-company between-employee variance	0.389	0.316
Number of observations	1,464	1,452
Log likelihood	-1404.548	-1235.537

Number of organisations in each model: 42
Description of the variables provided in the text, *p*-value in parentheses
Source: Author’s own study.

Table S2. MLM results (centred variables)

Variable	1	2	3	4	5
Sex	0.075 (0.072)	0.075 (0.072)	0.096 (0.011)	0.090 (0.017)	0.089 (0.018)
Position	0.214 (0.000)	0.214 (0.000)	0.074 (0.046)	0.077 (0.038)	0.077 (0.037)
Organisational tenure (1–3 years)	-0.100 (0.184)	-0.100 (0.182)	-0.086 (0.213)	-0.086 (0.208)	-0.087 (0.200)
Organisational tenure (4–9 years)	-0.131 (0.055)	-0.131 (0.053)	-0.082 (0.187)	-0.082 (0.187)	-0.084 (0.176)
Organisational tenure (10–19 years)	-0.093 (0.160)	-0.094 (0.158)	-0.033 (0.588)	-0.032 (0.600)	-0.034 (0.579)
Organisational tenure (20 years and more)	0.063 (0.379)	0.063 (0.381)	0.108 (0.100)	0.100 (0.126)	0.100 (0.127)
Company size	-0.198 (0.001)	-0.198 (0.001)	-0.188 (0.003)	-0.129 (0.035)	-0.129 (0.035)
Perceived local embeddedness (centred)	0.004 (0.000)	0.004 (0.000)	0.004 (0.000)	0.004 (0.000)	0.004 (0.000)
Employee participation (centred)			0.279 (0.000)	0.267 (0.000)	0.265 (0.000)
Perceived loc. emb. (centred) * Employee participation (centred)					-0.001 (0.401)
Intercept	3.835 (0.000)	3.836 (0.000)	3.797 (0.000)	3.780 (0.000)	3.783 (0.000)
Intercept variance	0.021	0.021	0.026	0.028	0.029
Slope variance (Perceived loc. emb.)		0.000			
Covariance between random intercepts and slopes (Perceived loc. emb.)		-0.000			
Slope variance (Employee participation)				0.007	0.007
Covariance between random intercepts and slopes (Employee participation)				-0.009	-0.009
Within-company between-employee variance	0.389	0.389	0.318	0.312	0.311
Number of observations	1,464	1,464	1,452	1,452	1,452
Log likelihood	-1405.845	-1405.839	-1251.340	-1246.766	-1246.414

Number of organisations in each model: 42

Description of the variables provided in the text, *p*-value in parentheses

The comparison of Models 1 and 2: Likelihood-ratio test statistic: 0.01, *p* = 0.915

The comparison of Models 3 and 4: Likelihood-ratio test statistic: 9.15, *p* = 0.010

Source: Author's own study.

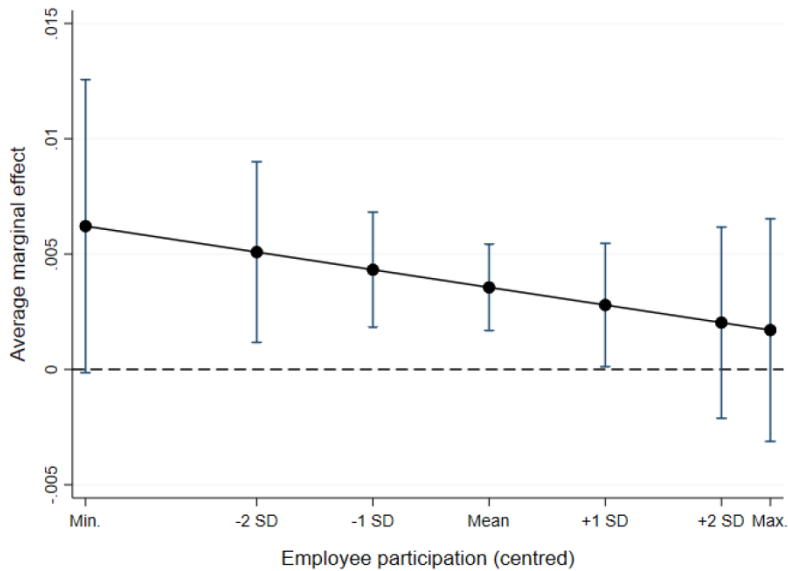


Figure S1. Average marginal effect of perceived local embeddedness for different values of employee participation (both variables centred)

The figure refers to Model 5 in Table S2. The dashed line shows a value of 0. The bars next to each value indicate the 95% confidence intervals. *Min.* – minimum value, *SD* – standard deviation, *Max.* – maximum value

Source: Author’s own study.