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An exploration of the relationship between member openness and perceived organisational openness at a particular point in the co-operative lifecycle

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ABSTRACT

Co-operatives are essentially relational entities which are jointly co-created by members and the co-operative. This relational co-creation is particularly important in the founding years of the co-operative and at points of crisis and regeneration in the co-operative lifecycle. This paper explores the relationship between member openness towards relational engagement and their perception of the co-operative's openness to that input (perceived openness) in a credit union context, prior to a major period of restructuring. Perceived openness is examined from two distinct perspectives, that is, awareness of right of involvement as owners (which in this paper we equated with co-operative member ownership structure) and possibility of involvement or perception of organisation openness (which in this paper we equated with co-operative process). It was found in the multivariate Logistic model that possibility rather than right of involvement is related to member openness. This suggests that the process of co-operation in a co-operative plays a greater role than the organisational structure of that co-operative in facilitating member input. This is a significant finding and suggests that greater attention needs to be given to process and openness in co-operative research and practice. It also suggests that co-operatives cannot just draw on their member ownership structure, in building member engagement at time of crisis.

1. Introduction

Co-operatives comprise of structural and process dimensions. The key structural features of consumer co-operatives are that they are customer-owned and controlled. While essential to the identity of co-operatives, these structural dimensions "merely provide a framework within which the co-operative process occurs" (Briscoe et al., 1982, p. 39). Co-operative definitions and research often tend to over-emphasise the structural (Briscoe et al., 1982; Fairbairn, 2003; Fletcher, 1976; Stryjan, 1993). This leads to an "anomalous situation of regarding organisations as successful…because they abide by minimal structural requirements" (Briscoe et al., 1982, p. 39) or a naivety that, "if the structure is right co-operation will necessarily flourish" (Fletcher, 1976:181). The co-operative process, by comparison, is effectively about the relationship with the members, described by Briscoe et al. (1982: 32) as a member orientation, treating members as 'origins of action', designing services which are 'for use' and jointly working with the membership to achieve this. Briscoe et al.'s (1982) presentation of co-operative process very much frames it within a relational co-creational space. They highlight openness as a key condition in supporting the co-operative process, which involves open dialogue with the members where they can "participate effectively in its activities and decision-making structures" (pg. 51). This paper examines members' perception of this organisational openness in relation to its impact on their own openness to relational engagement in a credit union context. Credit unions are member-owned financial consumer co-operatives. In terms of structure, we explore the members' awareness of their right of involvement. We compare the possibility and right of involvement in terms of their impact on member openness and, hence, examine Briscoe et al.'s (1982) and Briscoe and Ward's (2000, 2005) proposition that process is equally, if not more, important than structure for dynamic co-operative development (a key element of which is an engaged membership).

This relational openness is essential in the creation of the we-relation

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between members and between the co-operative and the member. The we-relation is particularly important in the founding years of the co-operative and during periods of crisis. We explore openness during phase five of the co-operative lifecycle (Cook et al., 2018), just prior to the period of restructuring in the Irish credit union sector.

2. Context and justification

Openness emerges as a central concept for co-operatives in the first of the seven co-operative principles, namely, *Voluntary and Open Membership*[1] (ICA, 1995). This principle is normally viewed from a structural perspective and as an organisational responsibility. However, if considered from a process viewpoint, it should incorporate the openness of both member and co-operative. If we consider openness from the members' perspective, the question arises what should members be open to? Firstly, sufficient numbers of members must be open to patronise the co-operative. Secondly, members are needed to govern the co-operative, although in practice this will usually involve only a small number of activist members. In fact, Stryjan (1994: 66) highlights that confining members' participation to governance roles is a "highly truncated representation of members' roles" where instead members' "prime contribution should be sought in the perpetual, decentralized activities of troubleshooting" in their daily relations with the co-operative. This form of member input is captured well in the co-creation literature (Vargo & Lusch, 2006, 2008; Ballantyne & Varey, 2008) and co-production in the public sector (Pestoff, 2009). Co-creation is a "joint sphere of interaction in which value is co-created" (Grönroos & Voima, 2013; Grönroos & Gummerus, 2014) between the member and a co-operative, involving a 'continuous dialogue' towards the development of 'joint problem definition and solutions' (Prahalad & Ramaswamy, 2004: 8). Hence, co-creation is essentially a relational concept, facilitating a relationship between members and their co-operatives that is neither about patronage nor governance.

FitzPatrick et al. (2015), through their relationality framework for co-creation, demonstrate that co-creation is "the actualisation of relationality" through dialogical interaction and the creation of a *we*-relational space. It is within this *we*-relational space that co-creation takes place (FitzPatrick et al., 2015) and effectively from where organisations and communities emerge (Bessant, 2015). For the we-relation and, hence, co-creation to emerge in co-operatives, both the member and the co-operative must be open to relate with one another (Cipolla & Manzini, 2009). The nature of this openness should be one of 'co-action' rather than 'instrumental' (Gergen, 2009: 344) or with intention (Donati & Archer, 2015; Gardiner, 1996). Viewing co-creation from this relational perspective places the member and organisational orientation centre-stage (Shotter, 1998, 2008), where openness of both is essential and where both are acting in response to the openness of the other (Linell, 2009; Buber, 1947).

To operationalise the concept of perceived openness, we draw on open source software (OSS) literature (Balka et al., 2010, 2014; West and O'Mahony, 2008) which has given particular focus to perceived openness. While the two sectors (OSS and co-operatives) have some similarities (in terms of collective governance and transition between an autonomous to a firm sponsored community[2]), OSS researchers have paid far more attention to perceived openness than co-operative researchers. Hence, an empirical study on perceived openness in a co-operative context is long over-due. In addition, the OSS literature has tended to distinguish between two aspects of perceived openness: 'right' of involvement and 'possibility' of involvement (Balka et al., 2010, 2014; West and O'Mahony, 2008). This approach presents us with a useful framework to operationalise structure and process dimensions in a co-operative context, where right and possibility, respectively, would seem to equate with the co-operative structure (central aspect of which is ownership and ensuing rights) and co-operative process (central aspect of which is openness towards member input). Previous research (Briscoe et al., 1982; Briscoe & Ward, 2000; Talonen et al., 2016) has highlighted, conceptually, both the difference and synergy between structure and process in co-operatives. In this paper, we will explore the interplay between awareness of right (through ownership structure) and possibility (through process of openness). While the co-operative literature has highlighted the need to distinguish between the structural and process elements of co-operatives, to the best of the researchers' knowledge, co-operative research has not empirically examined the interplay between co-operative structure and process in terms of member openness or willingness to participate.

The study was carried out prior to the period of major restructuring and increased regulation that has taken place in the Irish credit union movement in recent years. Hence, this study explores the pre-existing context. De Souza (2013, p. 142) advocates that, in order explain change, there has "to be a deeper understanding of pre-existing contexts and the mechanisms in operation prior to the introduction of any social programme (or change programme)". Our study does not explore the restructuring period itself, but rather the period just before. This pre-existing context gives us a clear point in time when credit unions and related regulatory entities were deciding the future direction of credit unions and where there was a choice between regeneration or more isomorphic/degenerative states. This period equates with phase five in Cook's co-operative lifecycle. As discussed by Byrne (2022, 2023), in order to take a regenerative choice, there is a need to develop the we-relation in co-operatives. This requires an openness to relational engagement from both the co-operative and the member.

Members, as owners of a co-operative, have the right to co-create and also have the possibility of co-creation. This study compares this right with the possibility (i.e. perceived openness) in terms of impact on the member openness to relational engagement with the credit union. It involves a survey with 712 credit union members.

The paper first presents a brief background context to the Irish credit union movement. This is followed by a discussion of the concept of relationality for co-operatives. We follow with a detailed discussion of openness, both in the context of member openness to involvement in their co-operative and the members' perception of the co-operative's openness to that involvement. We then present the research approach adopted and the methodological limitations of this approach. The findings are then presented, followed by a discussion and conclusions.

3. Background context of Irish Credit Union Movement

The first Irish Credit Union was founded in 1957 in Dublin in response to lack of available and affordable credit (McCarthy, 1996; Power et al., 2011). There was significant growth in the number of credit unions from the 1960s resulting in almost 500 credit unions by 2008 (Power et al., 2011). During the 'Celtic Tiger'[3] years (1997–2007), credit unions experienced significant growth in lending and savings, however, some stresses were starting to emerge (Byrne, 2006). Savings growth outstripped loan growth, resulting in a lower than optimal loan/savings ratio in many credit unions and thus decreasing margins (Byrne, 2006; McKillop & Quinn, 2017). These stresses were further exacerbated during the global financial crisis of 2008. Irish credit unions were not alone in this regard. Writing from a European context, Karafolas (2016)

[1] Co-operatives are voluntary organisations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination.

[2] Autonomous group involves an organic community whereas a sponsored community is one that has significant company involvement (West and O'Mahony, 2008).

[3] 'Celtic Tiger' is a colloquial term used to describe Ireland, during the Irish economic boom years between 1997 and 2007. The term was first coined by economist Kevin Gardiner in a 1994 Morgan Stanley Report.

indicates that co-operative banks across Europe were affected by this crisis.

A Statutory Commission on Credit Unions was established in 2011 whose purpose was to review the Irish Credit Union movement and make recommendations for the most effective regulatory structure for credit unions (McCarthy et al., 2016). In March 2012, the Commission produced its final report and made a number of recommendations in relation to increased regulation, governance, and a major restructuring programme (McCarthy et al., 2016). Credit union restructuring started in earnest from 2013. Consequently, the period of this study which stretches from 2011 to early 2013 is prior to the implementation of the restructuring programme for credit unions. To highlight the change from 2011 to 2022, we present key data, relating to credit union numbers and financial data in Table 1 below.

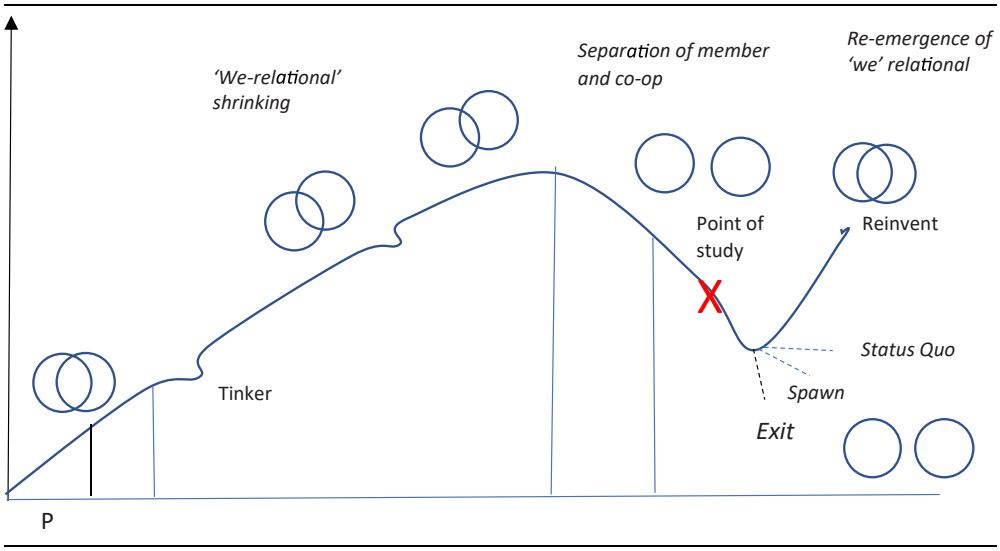
As can be seen from Table 1, the number of credit unions has decreased from 403 to 214 in Ireland (not including NI), primarily due to transfer of engagement activity. While the number of members has increased between 2011 and 2017, this did not translate into greater lending as is evidenced by the yearly declining loans/assets ratio which decreased from 40.7% to 27.1%. With poorer investment and loan income, the Return on Assets (ROA) decreased from 2.3% to 0.63%. This increased concerns about the future trajectory and viability of the credit union business model.

It is now noted by a number of commentators (Statutory Credit union Advisory Committee, 2016; McCarthy et al., 2016) that, while increased regulation has brought stabilisation, it has also been a significant burden on Irish credit unions (McCarthy et al., 2016; Oireachtas Joint Committee on Finance, 2017) and in US credit unions (van Rijn, 2022) and has created imbalance in some credit unions, where more time is devoted to regulation at the expense of the development of the credit union business model (CUAC, 2016). In addition, the expected economies of scale have not been realised (McKillop & Quinn, 2017; Jones et al., 2017; Central Bank of Ireland Credit Union Regulators, 2016, 2018[4]). Jones, Money and Swododa, 2017, p. 6 write:

> *"Disturbingly, however, greater size has not translated, at least not yet, into better financial trading performance….in other words, growth has failed to yield commensurate scale economies. Even more alarmingly, loans have dropped to only 26% of assets, reinforcing a downward trend in credit unions' return on assets (ROA) since 2012."*

While there is now acknowledgement that mergers have proved disappointing, they are still seen as the primary route to restructuring, although now seen more as an enabler rather than a solution (Credit Union Regulator, 2016; 2018; see footnote 6). Ntrinias (2016, p. 64) refers to the 'one way' approach to restructuring that takes prominence in co-operatives based on centralisation which, he argues, leads to a "deviation from the traditional user principle co-operative model".

In the Irish credit union context, mergers or transfers of engagement were the only model given any real consideration. While a small number of credit unions experimented with collaborative models, such as Credit Union Service Organisations (CUSOs), there was no support for such endeavors from credit union related authorities such as the Credit Union Commission, credit union regulators, or the Restructuring Board (ReBo) (Centre for Co-operative Studies, 2012; Byrne et al., 2012). In addition, members were seen as passive stakeholders and had no real input into any of these developments (Byrne et al., 2012). There was an implicit assumption that members are only interested in services and not really interested in participation in governance or co-creation of the credit union (Byrne, 2014; Byrne & McCarthy, 2014). The authors of this paper are of the view that this assumption may have prevented credit union leadership seeing the true potential of the members as co-creators. This paper explores this potential of the membership through openness to engagement with the credit union and the role of the credit union context in that openness. We explore this at phase 5 in the co-operative lifecycle prior to the period of re-structuring.



4. Openness and relationality

Although, it is argued that all organisations emerge and exist out of relations (Bessant, 2015; Gergen, 2009), this is particularly the case for co-operatives which are formed and reproduced through intense relational activity. In addition, many co-operatives are essentially relational businesses. This is particularly the case for credit unions, which fit into Cipolla and Manzini's (2009) characterisation of a relational service. They indicate that a "relational service model introduces a circular interactional model" whose main criterion of

[4] Public talks by Credit Union Regulators at various forums. Two such talks were from the then Registrar of Credit unions at the Irish League of Credit Unions AGM in 2016 and the second talk was to the Cork Credit Union Chapter on the 21st June, 2018 in Cork.

Table 1
Overall credit union statistics (2011 and 2012) in Ireland* (not including NI).

	2011	2022
No of independent credit unions	403	214
No of members	2.9 million (2010)	3.2 million
Assets	13.78BN	19.98BN
Loans/Assets ratio	40.7%	27.1%
Return on Assets (ROA)	2.3%	.63%

(Figures compiled from various sources: Central Bank of Ireland Report on the Financial Conditions of Credit Unions, December 2021)
* These statistics only relate to the ROI and not NI (which are not under the regulation of the Central Bank of Ireland)

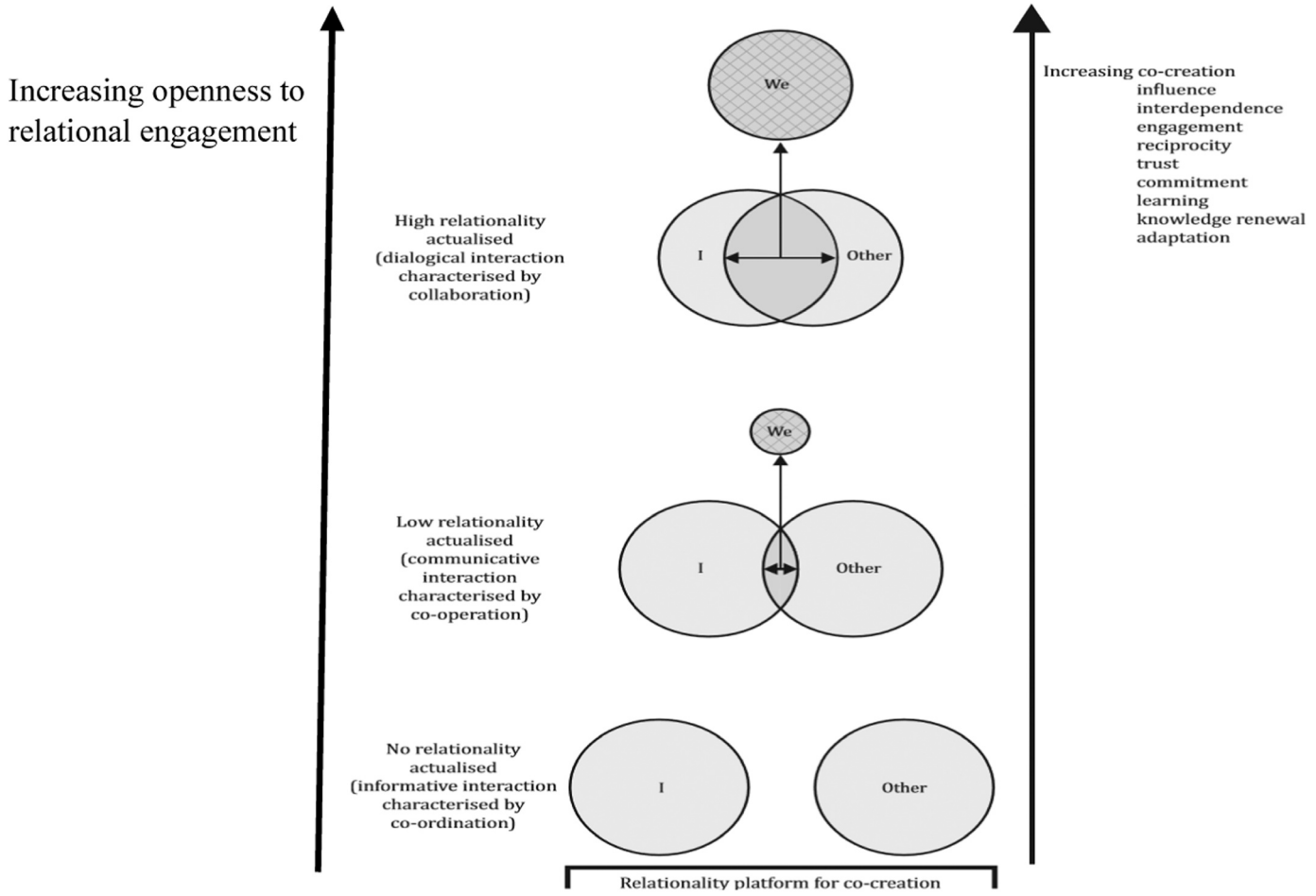


Diagram 1. Relationality framework (reproduced from Fitzpatrick et al., 2015:467).

quality is its openness to the other and collaboration (Cipolla & Manzini, 2009: 48–50). This openness and collaboration is captured well in FitzPatrick et al.'s (2015) relationality framework in relation to co-creation. They indicate that only with increasing openness between participants (the I and the other) will relationality and co-creation be actualised. Diagram 1 presents an adaption of their relationality framework diagram.

As depicted in Diagram 1, (adapted from FitzPatrick et al., 2015), co-creation is only achieved as relationality is actualised. The relationality platform for co-creation arises at the point of interaction between two entities (in our case the member and credit union). However, it is only with the emergence of the we-relation through co-operative and collaborative based interaction does relationality and co-creation become actualised. This we-relation relation is effectively a third entity (Donati & Archer, 2015) within the relationship between the member and the organisation with its own generative powers (Donati & Archer, 2015; Gergen, 2009). This has been conceptualised by philosophers as 'between' (Buber, 1947:241) or 'inter-world' space (Linell, 2009:145). Hence, the point of interest is not the individual or the organisation but the space in-between' where the reproduction of the co-operative emerges (Bessant, 2014, 2015). The problem of "achieving and maintaining the we-relation is the problem of all voluntary associations" where over time the organisation becomes unresponsive to the "primary relations at the micro-level" (Donati & Archer, 2015:190). The emergence and reproduction of the we-relation requires an openness to relational engagement from both members and the co-operative. This draws attention to the co-operative as a living system (Lapoutte, 2020).

5. Member openness

The emergence of relationality calls for an orientation of 'openness'

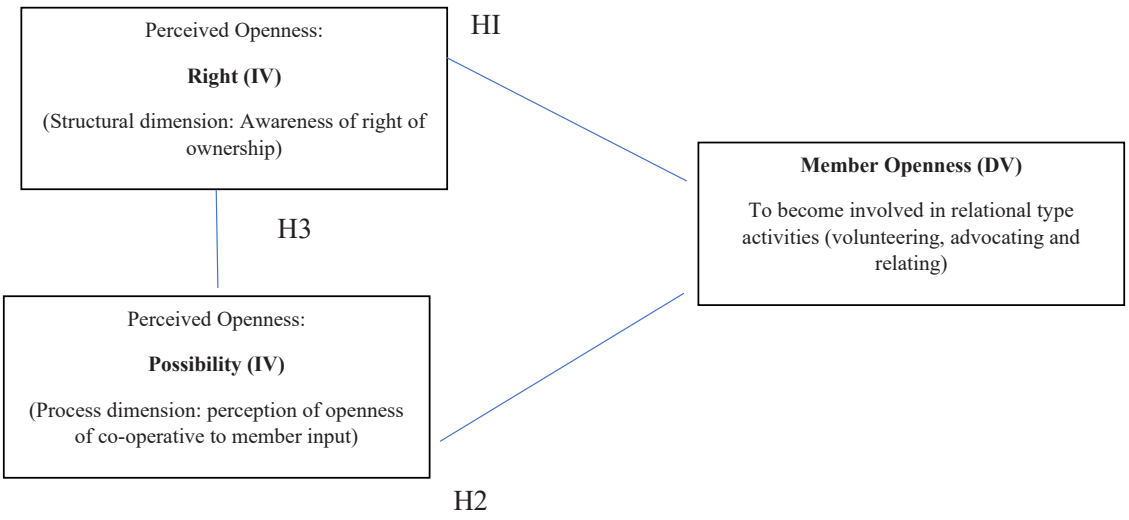


Diagram 2. Conceptual presentation of H1, H2 and H3.

(McNamee, Gergen and Anderson, 1999) to the development of a we-relation between both parties where both enter each other's processes (FitzPatrick et al., 2015). This openness is one that is non-instrumental (Donati & Archer, 2015; Gardiner, 1996). It also implies an unconditionality (Levinas, 1989) which has been characterised as a relational responsibility (McNamee & Gergen, 1999) to the other where one is "exposed to the other without restraint or reserve" (Levinas, 1989:182). In their discussion of relational services, Cipolla and Manzini (2009: 49) also highlight the importance of this lack of intention where in a relational service,

> *"People are personally involved, they are not representing someone else or operating according to a definite plan. Participants are "presences" one for another."*

Our measures of relational engagement incorporate this unconditionality. The first measure is *openness to volunteering.* Volunteering has been described as an act of "giving of oneself to others" which draws us from "our self-concern and reaching out to others" (Story, 1992:16). Some co-production/co-creation writers (Pestoff, 2010, 2012; Olsson, 2012) have presented volunteering as a citizen/consumer co-creation activity. The customer engagement literature (Van Doorn et al., 2010; Brodie et al., 2011; Bolton, 2011; Jaakkola & Alexander, 2014) also highlights the role of volunteering and indicates that customer engagement extends beyond the personalised experience and service transaction to incorporate a type of customer citizenship (Rosenbaum & Massiah, 2007). This has also been discussed as being voluntary in nature (Bettencourt, 1997) and involving extra role behaviours that go beyond the service transaction and self-interest (Ahearne et al., 2005).

In addition to volunteering, consumer co-operatives, such as credit unions, require the consumer member to advocate for the organisation. Such advocacy can be in the form of positive 'word of mouth'. Co-creation and customer engagement authors have used 'word of mouth' as a co-creation activity in their studies (Gruen et al., 2000; Olsson, 2012; Brodie et al., 2011). In the study, we explore the members' openness to advocate as a second relational engagement activity.

However, before members are open to volunteer or advocate for the credit union, they must be first open to relational engagement with the credit union. Drawing on the relationship marketing literature, Grönroos' (1997, 2006) 'relational mode' concept is useful here. He asserts that consumers can fall into three modes: active (where they seek and welcome contact with the organisation); passive (where they will seek contact when they require it); and non-relational (where they do not seek or welcome contact). It is only those members who are in an active relational mode who will be willing to relationally engage with the credit union. Grönroos (1997) indicates that those in 'passive' or 'non-relational' modes will be less open to engage. Hence, in the study, we also explore the members' openness to actively relate as a third relational activity.

These three relational engagement activities - volunteering, advocating, relating – can be seen as indications of an openness to engage in the "processes of the other" (FitzPatrick et al., 2015:465) and thus enter into relationality and the development of the we-relational orientation (FitzPatrick et al., 2015; Gergen, 2009). We ask the following research question: To what extent are members in credit unions open to relational engagement with the credit union, in terms of volunteering, advocating and relating. We must also ask to what extent the co-operative organisational context influences this openness.

6. Co-operative context as an influence on member openness

It has been highlighted that both the marketing and innovation literatures have not given sufficient attention to organisational context as a key motivational factor in co-creational processes (Foss et al., 2011). Likewise, in the co-operative literature, greater attention has been given to the intrinsic motivation of the individual member rather than the influence of the organisational context (Simmons & Birchall, 2005, 2007; Birchall & Simmons, 2004). While the participation chain model (Simmons & Birchall, 2005, 2007; Birchall & Simmons, 2004) brings 'back in the organisation' through concepts such as 'mobilisation mechanisms' and 'dynamics', De Freitas and Martin (2015) argue that the institutional dynamics element still remains underdeveloped in the model, with greater weight given to focus on the motivations of the individual member. In addition to the pioneering work of Simmons & Birchall (2005, 2007) and Birchall and Simmons (2004), studies (both within and outside the co-operative literature) that examine the firm context do so from either the firm perspective or the customer/member perception of the firm. From the firm's perspective, the focus has been primarily on internal mechanisms, such as employee competence and motivations (Foss et al., 2011), which were found to be key mediating factors in converting customer knowledge into firm innovation. In terms of the member/customer perception of the firm, studies have found that perception of distributive and procedural fairness (Franke et al., 2013); perception of interactional justice (Auh et al., 2007; Jussila et al., 2012 in a co-operative context); mobilization mechanisms such as opportunities to participate (Talonen et al., 2018; Pestoff, 2012; Simmons & Birchall, 2005, 2007; Birchall & Simmons, 2004; Brown, 1985 in a co-operative context); organisational dynamics (Birchall & Simmons, 2004; De Freitas & Martin, 2015); organisational routines and ideology

(Stryjan, 1994; Brown, 1985 in a co-operative context) and organisational proximity to the member (Byrne et al., 2015); perception of openness (Spaeth, von Krogh and He, 2014; Balka et al., 2010, 2014; West and O'Mahony, 2008) and Talonen et al., 2018 in a co-operative context, are positively related to member openness to become involved in co-creation. In this paper, we focus on perceived openness from the perspective of members (West and O'Mahony, 2008; Balka et al., 2010, 2014) which is reviewed in-depth in the following section.

7. Perceived openness

Perception of the other is a contextual condition (Levinas, 1989; Linell, 2009). Openness to engage in relationality is based on 'responsivity and anticipation" to the openness of the other in the interaction (Neisser, 1978 cited in Linell, 2009). Hence, for relationality to emerge, there must be a perception of the openness of the other as well as an openness to the other (Derrida, 1991, in his interpretation of Levinas).

To operationalise perceived openness, we heavily draw on the OSS literature as it has given perceived openness the most direct attention. Within the OSS literature, perceived openness has incorporated transparency (West and O'Mahony, 2008) and accessibility (West and O'Mahony, 2008; Balka et al., 2014). Transparency provides the information that allows members to "understand what is happening and why" (West and O'Mahony, 2008: 6) whereas accessibility allows the member to "directly influence the direction" of the organisation or community. As members of a co-operative are owners of the organisation, perceived openness needs to go beyond transparency and move towards accessibility, where transparency is more associated with the activity of 'observation' (West and O'Mahony, 2008) and accessibility with 'co-production/co-creation' (West and O'Mahony, 2008). Hence, our focus is on openness to relational engagement as a pre-cursor to co-creation.

In our examination of accessibility, we use Balka et al.'s (2014) definition of accessibility, where it is subdivided into 'right' and 'possibility'. In an OSS context, right is defined as the right to access and modify design through an 'open licence' (West and O'Mahony, 2008; Balka et al., 2014) and possibility relates more to the format of the code – is it written in such a way that members of the OSS community can access it and have the skills to work with it.

This subdivision works well for co-operatives, where 'right' could be equated with the legal structure of ownership and right to 'co-create' and 'possibility' could be equated with process in terms of openness to member participation. Thus, this presents us with a way of operationalising structure and process in terms of member openness in a co-operative. It also allows us to explore the interplay between structure and process in a co-operative context.

8. The study

The study sets out to explore the relationship between perceived organisational openness (right and possibility) and member openness to engage in relational activities (volunteering, advocating and relating). We first develop the two main hypotheses.

9. Hypotheses development

9.1. Perceived openness (right) and member openness to relational engagement

In the OSS literature, it was found that ownership or intellectual property rights vary in their level of importance to members depending on the context of the project (e.g., software vs hardware). This has led a number of researchers such as Balka et al. (2014) and Grünewald et al. (2012) to advocate for selective openness. Grünewald et al. (2012) suggests that ownership may be more of a hygiene factor than a key motivator for member openness or willingness to participate.

In terms of right of involvement in the co-operative, we have chosen an organisation where this right is inherent. The customers are the owners of the organisation and their right to shape the co-operative is fundamental to its organisational identity. Co-operative literature and practice put significant focus on the co-operative structure of member ownership. It has been suggested that, "since the time of Owen, co-operatives have been obsessed with formal structures" (Fletcher, 1976:181, cited in Stryjan, 1994) and 'expert design' (Stryjan, 1994:62). Hence, ownership has received significant attention in the co-operative literature in terms of its impact on member engagement. These studies have found that member perception of ownership increases member engagement and participation (e.g. Gray & Kraenzle, 1998; Birchall & Simmons, 2004; Jussila et al., 2012a, 2012b, 2014). However, ownership has been examined from the perspective of the members' perception of influence arising from ownership (Gray & Kraenzle, 1998; Birchall & Simmons, 2004; Österberg & Nilsson, 2009) or feeling as an owner (Gray & Kraenzle, 1998; Bhuyan, 2007) or psychological ownership (Jussila and Tuominen, 2010) or identification as an owner (Ole Borgen, 2001). Perceptions of ownership could therefore be viewed as being on a continuum, where the awareness of the right of ownership is the first stage and psychological ownership is much further down that continuum. Hence, once the discussion of ownership moves along the continuum, the measurements of ownership would seem to incorporate process elements. In this paper, we wish to confine our measure of ownership to that of a structural dimension and hence measure ownership as members' awareness of their right of ownership. We propose the following hypothesis:

H1. : Those members who are aware of the right of ownership in a credit union are more likely to be open to relational engagement.

9.1.1. Perceived openness (possibility) and member openness to relational engagement

We define the 'possibility' element of perceived openness as the customers' perception of how open the organisation is to their input or 'embracing input from volunteer participants' (Talonen et al., 2016, 2018; Spaeth et al., 2014, 227). As discussed earlier, openness to relational engagement is a response to the openness of the other (Linell, 2009).

Perception of the other has also been highlighted in employee openness to engage in organisational citizenship behaviour. This has been discussed under the concept of perceived organisational support (Eisenberger et al., 1986) which has been defined as the extent to which the employees perceive the organisation to value their input (Eisenberger et al., 1986). Within an employee context (Zampetakis et al., 2009; Krishnan and Mary, 2012) and volunteer context (Farmer & Fedor, 1999), it has been found that perceived organisational support has a positive relationship with co-creation type behaviour such as organisational citizenship.

Voorberg et al. (2015), after their review of publications on co-creation in the public sector (including Feller, Finnegan and Nilsson, 2011; Fuglsang & Pedersen, 2011; Gill et al., 2011; Gebauer et al., 2010; Pestoff, 2006, 2009, 2012), suggest that "open attitude of organisations towards citizen participation/acceptance of citizens" as partners and 'customer awareness' for co-creating possibilities (Voorberg et al., 2015:1342) are factors which influence citizens' openness to engage. Simmons and Birchall (2005:273), in their discussion of institutional dynamics, highlight the "role and attitude of service providers" in member openness to participation (citing Barnes et al., 2003; Klijn & Koppenjan, 2000). However, perceived openness is not the primary focus of any of these papers. Birchall (2013: 181), in his review of member participation in co-operatives, proposes that "people can be persuaded to participate in customer-owned businesses, provided the directors and managers of these businesses want them to" and indicate that the first question to ask is "do services providers want user participation?". Hence, the attitude of the co-operative leadership is a key

Table 2
Credit Union Profile (2011 status).

Credit Union	Location	Number of Members	Asset Size
Credit Union A	Large Rural Town	19,426	€93,425.377
Credit Union B	Inner City	5039	€21,474,349
Credit Union C	Rural Village	8190	€38,460,792

factor impacting actual openness and, in turn, perceived openness. In this paper, we set out to explore, not why members perceive the credit union to be open or not, but rather instead if members' perceptions of organisational openness triggers their openness to relational engagement with the credit union.

In this paper, we set out to explore if members' perceptions of organisational openness triggers their own openness to relational engagement with the credit union.

We therefore propose a second hypothesis as follows:

H2. : Members who perceive the credit union as open to their involvement (possibility) are more likely to be also open to relational engagement with the credit union.

9.1.2. Perceived openness (right) and perceived openness (possibility)

We also explore the relationship between *right* and *possibility* - does an awareness of the structure of member ownership (right of involvement) increase the likelihood that the member will perceive that the credit union is open to their involvement (possibility of involvement).

H3. : Those members who are aware of the right of ownership in a credit union are more likely to perceive the credit union as open to their involvement (possibility).

10. Research methods

In this section, we present our data, measures, and data analysis. We start with the description of the data collection process.

11. Data collection

The data was collected through a member survey in three credit unions. The survey was administered on-site and in person in each credit union. The survey was carried out over different days across a period of weeks. As can be seen from Table 3, the sample was fairly evenly distributed across age groups with 21% of less than 30 years olds and 10% of over 65 s. From the primary authors' experience of survey and voluntary work in credit unions, there is a mix of those who visit the credit union on any given day, from those who come weekly, monthly or on an ad-hoc basis. While the sampling method chosen was non-random and may not be representative of the population of credit union members, we would argue that it is representative of members who visit the credit union in any given week.

As the study is concerned with relational engagement, we deemed this approach legitimate. The study does not explore why members would join the credit union but rather their relational engagement with the credit union, once they have become members. The study also does not focus on members who are involved in the governance of the credit union; the focus is primarily on the ordinary member. Over 700 surveys were collected. The profile of the credit unions studied are outlined in Table 2 below;.

12. Measures and descriptive statistics

12.1. Member openness (volunteering, advocating and relating)

Member openness to relational engagement is comprised of three measures – openness to volunteering in the credit union, openness to advocate for the credit union, and openness to relate. It should be noted that this study only concerns itself with current rather than prospective members. Openness to volunteering was measured by asking members would they consider volunteering for the credit union. The responses indicate that 31% of members would be open to volunteer with the credit union, 30% were not sure and 39% would not be open. It should be noted that we did not wish to focus on members who are currently volunteering, but the broader mass of members. It has been found in previous research (Byrne et al., 2004) that members who are open or even unsure of volunteering, if asked often say yes when asked to volunteer. Openness to advocate was measured with a three item scale adapted from Arnett et al. (2003) and Olsson (2012) (e.g. "I often find myself telling people that I am a member of the credit union", "I like to talk about the credit union and am happy to encourage others to join" and "I know I can rely on the credit union if I need help") (the loadings on this factor in a four factor solution ranged from.750 to.904 and the reliability coefficient was.806). This variable was converted into three categories, where all the responses ranging from 1 to 1.66 were categorised as 'yes', the responses ranging from 1.68 to 3.66 were labelled as 'not sure' and the remaining responses from 3.68 to 7 were categorised as 'no'. As categorising data can be arbitrary, the first author asked another researcher who was not connected to the data to decide on the categorisations. It was found that 72% of members were open to advocate for the credit union through word of mouth. Twenty percent were unsure about advocating for the credit union and 3% were not open to advocate for the credit union. Five percent of members did not respond to these statements.

Openness to relate was explored by asking members to describe themselves in terms of whether they welcome contact from the credit union, would prefer to initiate contact themselves or would prefer no contact. Only 5% of the sample would prefer no contact, while 60% would welcome regular contact and communication from the credit union. Thirty-five percent would prefer to initiate the contact themselves.

It should be noted that these three measures of openness are all self-

Table 3
Description of Data.

Variables	Frequencies
Member Openness (openness to Relation Engagement)	349(49%)
Open	363(51%)
Somewhat/Not Open	
Possibility (perceive the Credit Union open)	398(58%)
Yes	293 (42%)
Somewhat/Not open	
Right (awareness of right of involvement)	348 (52%)
Aware	156 (23%)
Vaguely Aware	163 (25%)
Not Aware	
Gender	221 (36%)
Male	392 (64%)
Female	
Age	143 (21%)
< 30 years	100 (14%)
31–40	162 (23%)
41–50	220 (32%)
51–65	65 (10%)
66–75	
Length of time as a member of the credit union	50 (7%)
One to 3 years	177 (26%)
4–10 years	211 (30%)
11–20 years	254 (37%)
> 20 years	
Patronage	500 (70%)
Active	133 (19%)
Somewhat active	78 (11%)
Not active	
Member Value Preference	302 (44%)
Relational Value Dominance	75 (11%)
Technical Value Dominance	308 (45%)
Balanced Value Dominance	

perceived. This is a limitation and introduces the danger of bias. To help alleviate this possible bias, we create a composite variable from the measures, where the member must be open on more than one indicator to indicate openness.

These three relational engagement activities – openness to volunteering, openness to advocate and openness to relate – were combined into one composite variable called openness to relational engagement with the credit union. Members who expressed openness on two or more of these variables were categorised as open. Members who indicated that they were somewhat open on two or more of these of variables were labelled somewhat open. Members who indicated that they were not open on two or more of these variables were categorised as not open. All the records fell into one of these categories, that is there were no outliers where there was no discernible pattern (such as a different response on each variable). The two primary categories are open (49%) and somewhat open (49%), where only 2% of the surveyed members indicated that they were not open.

12.2. Perceived openness (right and possibility)

To measure members' awareness of their right to participate as a member-owner, members were asked: "Did you know as a member you are also part owner of your credit union and have a say in the running of the credit union?" Members were asked to respond on a three-point scale ranging from 'yes, I am aware of this' to 'no I did not know this'. As can be seen from Table 3, 52% of members are aware of their right of involvement with the remainder either only vaguely aware or not aware. This is an interesting result for a co-operative, where it might be assumed that all members would be aware. To examine possibility, we asked members the following question: "Do you feel that the credit union is open to suggestions from you as a member on how the credit union should be run, the type of services, complaints and so on?" This was a forced choice question, where members responded on a yes/no continuum. As can be seen from Table 3, 58% of members perceived the credit union as open to their involvement, with the remainder (42%) viewing the credit union as somewhat or not open.

13. Data analysis, model and independent control variables

As our dependent variable is binary, we use logistic regression analysis rather than multiple linear regression. To run this analysis, we employ the binary as well as multivariate logistic procedure in SPSS. Logistic regression is a mathematical modelling approach that is used to investigate the relationship of a number of independent variables with a binary dependent variable (Kleinbaum et al., 2010).

Our dependent variable 'Member Openness' is dichotomous, where 1 is open and 0 is 'not open'. Our independent variables of interest are 'possibility' (perception of credit union openness) and 'right' (awareness of right of involvement as a member-owner). Possibility was collapsed from a three level categorical variable to a dichotomous variable, due to lower frequencies in the third level, where 1 is yes (perceive possibility) and 0 is no (do not perceive the possibility). The variable right has three levels where 1 = aware of right; 2 = somewhat aware and 3 = not aware. We have four independent control variables: age (categorical variable with five levels), gender (dichotomous – male/female), patronage (categorical with three levels – active, somewhat active, inactive), length of membership (categorical with 4 levels – few years to greater than 20 years) and member value proposition (relational, technical and balanced value preference) The latter variable captures the value preference of members in terms of the service of the credit union, with a relational preference focusing on the relational dimensions of the service and technical focusing on price and convenience dimensions.

The analysis is based on 712 surveys. The descriptive statistics for the sample are presented in Table 3 below (Tables 4–7).

14. Results

The purpose of this paper was to explore if member openness to engagement in relational type activities is correlated with dimensions of perceived openness, that is, possibility and right. To explore this correlation, we use bivariate and multivariate logistic regression models. Our multivariate model incorporates a number of independent control variables such as patronage, age, gender, length of membership and member value preference.

Each bivariate model examines the impact of independent variables

Table 4
Right as a predictor of openness to relational engagement.

Variable	Reference Category	Bivariate Analysis			Multivariate Analysis		
		Odds Ratio (95% CI)	SE	P Value	Odds Ratio (95% CI)	SE	P Value
Awareness of the right of ownership (Right)							
Right: Aware	Not Aware	1.60 (1.10–2.33)	0.31	0.01	1.45 (0.94–2.24)	0.32	0.09
Right: Vaguely Aware		1.08 (0.69–1.68)	0.24	0.73	1.32 (0.80–2.18)	0.34	0.27
Patronage							
Somewhat Active	Active				0.89 (0.57–1.37)	0.20	0.59
Not Active					0.57 (0.31–1.03)	0.17	0.06
Membership Length							
4–10 years	1–3 years				0.64 (0.31–1.35)	0.24	0.24
11–20 years					0.64 (0.31–1.34)	0.24	0.24
> 20 years					0.82 (0.39–1.74)	0.31	0.61
Member Value Preference							
Functional Dominance	Relational Dominance				0.60 (0.32–1.12)	0.19	0.11
Balance					1.09 (0.76–1.57)	0.20	0.63
Gender							
Female	Male				1.16 (0.81–1.66)	0.21	0.42
Age							
31–40	< 30				0.84 (0.47–1.51)	0.25	0.57
41–50					1.13 (0.67–1.91)	0.30	0.64
51–65					1.17 (0.70–1.95)	0.30	0.54
> 65					0.73 (0.35–1.51)	0.27	0.39
N		667			563		
LR $\chi 2$		7.85			20.73		
Prob > $\chi 2$		0.02			0.11		
Pseudo R2		0.01			0.03		

Table 5
Possibility as a Predictor of Relational Engagement.

Variable	Reference Category	Bivariate Analysis			Multivariate Analysis		
		Odds Ratio (95% CI)	SE	P Value	Odds Ratio (95% CI)	SE	P Value
Perception of Credit Union Openness (Possibility)							
Possibility: Yes	Possibility: No	2.05 (1.51–2.79)	0.32	0.00	1.75 (1.24–2.47)	0.31	0.00
Patronage							
Somewhat Active	Active				0.82 (0.53–1.28)	0.19	0.39
Not Active					0.60 (0.33–1.08)	0.18	0.09
Membership Length							
4–10 years	1–3 years				0.75 (0.36–1.56)	0.28	0.44
11–20 years					0.70 (0.34–1.45)	0.26	0.34
> 20 years					0.82 (0.39–1.71)	0.31	0.59
Member Value Preference							
Functional Dominance	Relational Dominance				0.68 (0.37–1.25)	0.21	0.21
Balance					1.07 (0.75–1.54)	0.20	0.70
Gender							
Female	Male				1.10 (0.77–1.58)	0.20	0.59
Age							
31–40	< 30				0.98 (0.55–1.75)	0.29	0.95
41–50					1.27 (0.75–2.14)	0.34	0.37
51–65					1.41 (0.85–2.33)	0.36	0.18
> 65					0.92 (0.45–1.87)	0.33	0.82
N		691			570		
LR χ2		21.34			26.82		
Prob > χ2		0.00			0.01		
Pseudo R2		0.02			0.03		

Table 6
Relational Engagement as a Predictor of Possibility.

Variable	Reference Category	Bivariate Analysis			Multivariate Analysis		
		Odds Ratio (95% CI)	SE	P Value	Odds Ratio (95% CI)	SE	P Value
Relational Engagement							
Willing	Somewhat/Not Willing	2.05 (1.51–2.79)	0.32	0.00	1.75 (1.24–2.47)	0.31	0.00
Patronage							
Somewhat Active	Active				1.23 (0.78–1.94)	0.29	0.36
Not Active					0.65 (0.36–1.17)	0.20	0.15
Membership Length							
4–10 years	1–3 years				0.41 (0.19–0.90)	0.16	0.03
11–20 years					0.50 (0.23–1.08)	0.20	0.08
> 20 years					0.47 (0.21–1.03)	0.19	0.06
Member Value Preference							
Functional Dominance	Relational Dominance				0.60 (0.33–1.09)	0.18	0.10
Balance					0.81 (0.56–1.16)	0.15	0.25
Gender							
Female	Male				1.18 (0.82–1.70)	0.22	0.37
Age							
31–40	< 30				0.78 (0.44–1.38)	0.23	0.39
41–50					1.16 (0.68–1.96)	0.31	0.59
51–65					1.14 (0.69–1.90)	0.30	0.61
> 65					1.45 (0.70–2.99)	0.53	0.31
N		691			570		
LR χ2		21.34			30.80		
Prob > χ2		0.00			0.00		
Pseudo R2		0.02			0.04		

separately on member openness. The model chi-square tests the null hypothesis that the logistic coefficient for possibility or right is 0, that is, it examines if right or possibility is related to member openness to relational engagement. Right and possibility are examined separately with member openness to relational engagement. We first examine right.

H1. : Those members who are aware of the right of ownership in a credit union are more likely to be open to relational engagement.

$$Member\ \ Openness\ \ to\ \ Relational\ \ Engagement = \beta_0 + \beta_1 Yes\ \ \ Awareness + \beta_2\ \ \ Vague\ \ \ Awareness + error$$

Member Openness to Relational Engagement=f(Right, Patronage, Member Length, Member Value Preference, Gender, Age)

$$\begin{aligned} Member\ \ Openness\ \ to\ \ Relational\ \ Engagement &= \beta_0 + \beta_1 Yes \\ & Awareness + \beta_2\ \ Vague\ \ Awareness + \beta_3 Somewhat \\ & Active + \beta_4 Not\ \ Active + \beta_5 Length 4 - 10yrs + \beta_6 Length 11 - 20yrs \\ & + \beta_7 Length > 20yrs + \beta_8 Technical\ \ Dominance + \beta_9 Balance \\ & + \beta_{10} Gender + \beta_{11} Age\ \ (31 - 40) + \beta_{12} Age(41 - 50) \\ & + \beta_{13} Age(51 - 65) + \beta_{14} Age(\rangle 65) + error \end{aligned}$$

The bivariate logistic regression model was found to be statistically significant ($\chi 2 = 7.85, p < 0.05$). However, being vaguely aware compared to those who are somewhat/not aware was found to be statistically insignificant (OR=1.08,p = 0.73). Being aware compared to those who are somewhat/not aware has been found to be statistically significant (OR=1.6,p = 0.01). The odds ratio imply that those who are

Table 7
Right as a Predictor of Possibility.

Variable	Reference Category	Bivariate Analysis			Multivariate Analysis		
		Odds Ratio (95% CI)	SE	P Value	Odds Ratio (95% CI)	SE	P Value
Awareness of the right of ownership (Right)							
Right: Aware	Not Aware	2.60 (1.77–3.83)	0.51	0.00	3.16 (2.02–4.97)	0.73	0.00
Right: Vaguely Aware		0.97 (0.62–1.51)	0.22	0.89	1.26 (0.76–2.11)	0.33	0.37
Patronage							
Somewhat Active	Active				1.37 (0.86–2.18)	0.33	0.19
Not Active					0.60 (0.32–1.11)	0.19	0.10
Membership Length							
4–10 years	1–3 years				0.29 (0.13–0.65)	0.12	0.00
11–20 years					0.34 (0.15–0.76)	0.14	0.01
> 20 years					0.30 (0.13–0.69)	0.13	0.01
Member Value Preference							
Functional Dominance	Relational Dominance				0.63 (0.34–1.18)	0.20	0.15
Balance					0.87 (0.60–1.27)	0.17	0.48
Gender							
Female	Male				1.37 (0.94–1.99)	0.26	0.10
Age							
31–40	< 30				0.67 (0.37–1.23)	0.21	0.20
41–50					0.94 (0.54–1.64)	0.26	0.84
51–65					0.97 (0.57–1.66)	0.27	0.93
> 65					0.96 (0.44–2.07)	0.38	0.91
N		652			552		
LR $\chi 2$		36.54			53.59		
Prob > $\chi 2$		0.00			0.00		
Pseudo R2		0.04			0.07		

aware have 1.6 times (60%) higher odds to be willing to engage compared to those who are somewhat/vaguely aware. The multivariate logistic regression model was found to be statistically insignificant ($\chi 2 = 20.73$,p = 0.11). As the overall model is statistically insignificant, the predictors were not interpreted.

H2 : Members who perceive the credit union as open to their involvement (possibility) are more likely to be also open to relational engagement with the credit union.

Relational Engagement=f(Possibility)

$$Relational\quad Engagement = \beta_0 + \beta_1 Possibility + error$$

Member Openness to Relational Engagement=f(Possibility, Patronage, Member Length, Member Value Preference, Gender, Age)

$$\begin{aligned} Relational\quad Engagement = {} & \beta_0 + \beta_1 Possibility + \beta_2 Somewhat\quad Active + \beta_3 Not \\ & Active + \beta_4 Length 4 - 10yrs + \beta_5 Length 11 - 20yrs \\ & + \beta_6 Length > 20yrs + \beta_7 Technical\quad Dominance \\ & + \beta_8 Balance + \beta_9 Gender + \beta_{10} Age\quad (31 - 40) \\ & + \beta_{11} Age(41 - 50) + \beta_{12} Age(51 - 65) + \beta_{13} Age(\rangle 65) \\ & + error \end{aligned}$$

The bivariate logistic regression model was found to be statistically significant ($\chi 2 = 21.34$,p < 0.01). Possibility was found to be statistically significant (OR=2.05,p < 0.01). The odds ratio of Possibility imply that those who perceive the credit union as open have 2.05 times (105%) higher odds to be willing to relationally engage with the credit union compared to those who do not perceive the credit union as not open.

The multivariate logistic regression model was found to be statistically significant ($\chi 2 = 26.82$,p < 0.05. The odds ratio of Possibility imply that those with perception of credit union openness have 1.75 times (75%) higher odds to be willing to relationally engage compared to those who do not perceive the credit union as open. Patronage activity also has an impact on member willingness to relation engagement. The odds ratio of not active imply that those who are not active have 0.6 times (40%) lower odds to be willing to engage compared to those who are active.

We also regressed relational engagement on possibility.

Possibility=f(Relational Engagement)

$$Possibility = \beta_0 + \beta_1 Relational\quad Engagement$$

Possibility=f(Relational Engagement, Patronage, Member Length, Member Value Preference, Gender, Age)

$$\begin{aligned} Possibility = {} & \beta_0 + \beta_1 Relational\quad Engagement + \beta_2 Somewhat\quad Active + \beta_3 Not \\ & Active + \beta_4 Length 4 - 10yrs + \beta_5 Length 11 - 20yrs + \beta_6 Length \\ & > 20yrs + \beta_7 Technical\quad Dominance + \beta_8 Balance + \beta_9 Gender \\ & + \beta_{10} Age\quad (31 - 40) + \beta_{11} Age(41 - 50) + \beta_{12} Age(51 - 65) \\ & + \beta_{13} Age(\rangle 65) + error \end{aligned}$$

We found that this was statistically significant ($\chi 2 = 21.34$,p < 0.01). Relational engagement was found to be statistically significant (OR=2.05, p < 0.01). The odds ratio of relational engagement implies that those willing to engage had 2.05 times (105%) higher odds of possibility compared to those that are somewhat/not willing.

Hence, there would appear to be a two-way relationship between possibility and relational engagement. In other words, members who are open to relational engagement may also perceive the credit union as more open, and members who perceive the credit union as open are more likely to be also open to relational engagement with the credit union, where both variables are influencing and reinforcing each other. This is in line with the theoretical discussion on the we-relation, where both the co-operative and the member enter into each other's processes (FitzPatrick et al., 2015) and for relationality to emerge there must be a perception of the openness of the other as well as an openness to the other (Derrida, 1991 in his interpretation of Levinas).

H3. : Those members who are aware of the right of ownership in a credit union are more likely to perceive the credit union as open to their involvement (possibility).

Here we explore possibility as a function of right.

Possibility=f(Right)

$$Possibility = \beta_0 + \beta_1 Aware + \beta_2 Vaguely\quad Aware$$

Possibility=f(Right, Patronage, Member Length, Member Value Preference, Gender, Age)

$$Possibility = \beta_0 + \beta_1 Aware + \beta_2 Vaguely\ \ Aware + \beta_3 Somewhat\ \ Active + \beta_4 Not\ Active + \beta_5 Length 4-10yrs + \beta_6 Length 11-20yrs + \beta_7 Length > 20yrs + \beta_8 Technical\ \ Dominance + \beta_9 Balance + \beta_{10} Gender + \beta_{11} Age\ \ (31-40) + \beta_{12} Age(41-50) + \beta_{13} Age(51-65) + \beta_{14} Age()65) + error$$

The bivariate logistic regression model was found to be statistically significant ($\chi 2 = 36.54, p < 0.01$). Being aware of the right of involvement compared to being not aware has been found to be statistically significant (OR=2.6,$p < 0.01$). The odds ratio of being aware imply that those aware about ownership of rights have 2.6 times (160%) higher odds of possibility compared to those who are not aware.

The multivariate logistic regression model has also been found to be statistically significant ($\chi 2 = 53.59$, $p < 0.01$). Being aware, being not active, membership lengths and gender have been found to be statistically significant.

The odds ratio of being aware imply that those aware about ownership rights have 3.16 times (216%) higher odds of possibility compared to those who are not aware. This highlights the importance of structure in enabling the perception of the possibility of involvement in co-operatives.

The odds ratio of being not active (patronage) imply that those not active have 0.6 times (40%) lower odds of possibility compared to those who are active.

The odds ratio of membership length (4–10 years) imply that those with 4–10 years' membership have 0.29 times (71%) lower odds of possibility compared to those with 1–3 years' membership. The odds ratio of membership length (11–20 years) imply that those with 11–20 years' membership have 0.34 times (66%) lower odds of possibility compared to those with 1–3 years' membership. The odds ratio of membership length (>20 years) imply that those with > 20 years' membership have 0.3 times (70%) lower odds of possibility compared to those with 1–3 years' membership. This might suggest a complacency the longer the membership in the credit union. The odds ratio of gender imply that females have 1.37 times (37%) higher odds of possibility compared to males.

14.1. Methodological limitations

It should be noted that this study highlights a correlation rather than a causal relationship between possibility and member openness. As cause and effect is very difficult to measure without a controlled experiment research method, the theoretical discussion in this paper helps to add support to the significance of our finding of correlation between member openness and perceived openness. The relationality focus, which gives primacy to the role of context, also helps to lend support to these findings.

15. Discussion and conclusion

The purpose of the paper was to explore the relationship between perceived openness (right and possibility) and member openness to become relationally engaged with the credit union. It was found that the possibility of involvement is significantly associated with member openness, but right of involvement is not (in the multivariate logistic model). Our findings indicate that, for credit unions, being structured as a member-owned co-operative may not be enough in itself to encourage member openness towards relational engagement. However, we did find that members who are aware of the structure of ownership are more likely to also perceive the credit union as open in terms of possibility of involvement. Our findings highlight the importance of the co-operative process in facilitating member openness (Briscoe et al., 1982; Briscoe & Ward, 2000) in addition to the co-operative structure. However, in relation to possibility, we found a two-way relationship between relational engagement and possibility. Hence, both variables are influencing each other rather than one having a clear impact on the other. This two-way relationship is in line with the theoretical understanding of the development of the we-relation in organisations.

The paper makes a number of contributions. The primary contribution of the paper is the empirical exploration of the interplay between structure and process dimensions of the co-operative in terms of member openness to relational engagement. From the members' perspective, it offers an empirical exploration of Briscoe et al.'s (1982) and Briscoe and Ward's (2000) conceptual proposition on the importance of process over structure. However, our findings indicate that while the structural dimension of ownership is important, it may not be enough in itself. While further research is required, particularly within a co-operative context, ownership structure may be more of a hygiene factor as suggested by Grünewald et al. (2012). It should also be noted that the study does not explore the interplay between structure and process within the co-operative in terms of the impact on co-operative openness (we instead confine our study to the members' perception of organisational openness). Without the structure of ownership, there is a greater likelihood of the existence of Pestoff's (2009) glass ceiling of participation. In other words, the structure of member ownership creates a context where the organisation is more likely to be open and the extent of openness then, in turn, influences the members' openness to relationally engage with their co-operative. Hence, member ownership structure is the starting point and the support infrastructure, but the extent of possibility of member participation requires the constant attention (Stryjan, 1993) of the co-operative. Building upon this argument, we are of the view that a clear separation of structure and process is useful in the research; otherwise there may be a tendency for co-operative researchers and practitioners to over-focus on the structural elements of the co-operative. In addition, structure or right of ownership, related to the fixed infrastructure, is the easier and more mechanic dimension of the co-operative whereas the process within the structural infrastructure is more organic and fluid in nature. This makes it more difficult for both co-operative researchers and practitioners to capture and delineate co-operative process and encourages a tendency to primarily focus on structure rather than process.

We also make a contribution in terms of our operationalisation of structure and process through the use of 'right' and 'possibility' which allows us to disentangle key dimensions of ownership in terms of their impact on member openness. While the concept of right arising out of ownership is clear and understood in a co-operative context, the concept of possibility is more nuanced. It could be said that right of ownership leads to a more pre-determined discussion and in a sense tends to close rather than open a debate, where ownership needs to be managed rather than leveraged. Possibility, on the other hand, by its nature, is a more nuanced and open discussion and includes awareness of participation opportunities (Birchall, 2013), the capability of the member to avail of the opportunities and the openness of the co-operative to facilitate. However, as with our discussion above, right may set the foundation for possibility and hence their inter-dependence must be acknowledged.

A further contribution lies in our examination of ownership as a purely structural dimension. Previous examinations of ownership such as 'feeling like an owner/psychological ownership/identify as an owner' (Gray & Kraenzle, 1998; Bhuyan, 2007; Jussila and Tuominen, 2010; Ole Borgen, 2001) or influence of ownership (Gray & Kraenzle, 1998; Birchall & Simmons, 2004; Österberg & Nilsson, 2009; Cechin et al., 2013) incorporate a process dimension which makes it more challenging to disentangle structure from process. Our exclusively structural conceptualisation of ownership circumvents such theoretical confusion.

This paper also suggests the relevancy of researching co-operatives through a relationality framework. A relational ontological approach requires the research to look beyond the individual member and the co-operative towards the co-created and relational space between the two. Such an approach helps to integrate the dualities in co-operatives such as member/organisation, social/economic objectives and structure/process. Other frameworks used to research co-operatives have tended

to be either individualist (both economics and sociology) or collectivist (primarily sociology) and have largely failed to treat co-operatives as hybrid organisation (Ntrinias, 2016: 6). This has been highlighted as a particular problem and gap in co-operative research by a number of researchers (Mooney & Gray, 2002; Suter & Gmür, 2013; Byrne, 2022).

The focus on context within a relational ontology is also of benefit to co-operative research. In terms of member openness to engage, the tendency, particularly in credit union research and practice, is to look more to members' intrinsic motivational factors rather than the influence of organisational context (Birchall, 2013). The empirical co-operative studies which have examined organisational context and member participation have been within the agricultural co-operative sector (Brown, 1985; Gray & Kraenzle, 1998; Ole Borgen, 2001; Cechin et al., 2013) and social services (Pestoff, 2006, 2009; Birchall & Simmons, 2004; Simmons and Birchall, 2005). Our study on credit unions, therefore, further extends this field of research and adds an organisational context dimension to member participation research in these co-operative sectors.

We believe that we have highlighted the value of co-operative practice as a way of adding greater insight into co-creation literature, particularly as it has been suggested that this literature is caught in a provider-centric trap (see for example Heinonen et al., 2010; Heinonen et al., 2013; O'Malley and Tynan, 2000). Hence, co-operative practice could be a useful 'living lab' context within which to study co-creation within organisational contexts outside of co-operatives. Co-creation literature also presents co-operative researchers with a useful frame within which to look at co-operative practice afresh and the co-created relational space very much captures the essence of co-operatives. As presented in this study, there are interesting parallels between co-operatives and OSS communities, in that the software communities (autonomous or firm sponsored) tend to have some level of collective governance. In addition, co-operatives generally make a transition from an autonomous community of members in their earlier years to having more resemblance to a 'firm sponsored community' as they mature. Responding to Balka et al.'s (2014) calls for perceived openness to be considered in other sectors outside of OSS, co-operatives offer a unique context in which to examine perceived openness and its impact on members' participation.

The paper also highlights the relevance of exploring structure and process within a co-operative lifecycle framework, particularly at the fifth stage of the lifecycle. At this point, there is a period of choice (Cook, 2018) for the co-operative of regeneration or degeneration. For the regenerative choice, the co-operative needs to turn to the membership for direction (Stryjan, 1994; Byrne, 2023), even though the natural inclination maybe, to turn inwards or externally to mimicing competitors (Stryjan, 1994). However, as we found the members willingness to engage is a latent resource existing in the credit union, that can be activated by the extent of the credit union's own openness to member engagement. The member willingness to engage beyond patronage is the well-spring of co-operative regeneration and the co-operative has the choice to enable this engagement or to close it off. In other words, as Cook (2018) indicates, co-operatives in the fifth stage of their lifecycle do in fact have that choice between regeneration or degeneration.

CRediT authorship contribution statement

Noreen Byrne: Conceptualization, Methodology, Writing – review & editing. **Olive McCarthy**: Conceptualization, Writing – review & editing. **Deirdre O'Loughlin**: Conceptualization, Writing – review & editing.

Data availability

The authors do not have permission to share data.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.jcom.2023.100218.

References

Ahearne, M., Bhattacharya, C. B., & Gruen, T. (2005). Antecedents and consequences of customer-company identification: Expanding the role of relationship marketing. *Journal of Applied Psychology, 90*(3), 3 (Article).

Arnett, D. B., German, S. D., & Hunt, S. D. (2003). The identity salience model of relationship marketing success: The case of nonprofit marketing. *Journal of Marketing, 67*(2), 2 (Article).

Auh, S., Bell, S. J., McLeod, C. S., & Shih, E. (2007). Co-production and customer loyalty in financial services. *Journal of Retailing, 83*(3), 3 (Article).

Balka, K., Raasch, C., & Herstatt, C. (2010). How open is open source?–software and beyond. *Creativity and Innovation Management, 19*(3), 248–256.

Balka, K., Raasch, C., & Herstatt, C. (2014). The effect of selective openness on value creation in user innovation communities. *Journal of Product Innovation Management, 31*(2), 392–407.

Ballantyne, D., & Varey, R. J. (2008). The service-dominant logic and the future of marketing. *Journal of the Academy of Marketing Science, 36*, 11–14.

Bessant, K. C. (2014). The relational genesis of community: Self–other dialogue. *Journal of Community & Applied Social Psychology, 24*(6), 6 (Article).

Bettencourt, L. A. (1997). Customer voluntary performance: Customers as partners in service delivery. *Journal of Retailing, 73*(3), 3 (Article).

Bhuyan, S. (2007). The "people" factor in cooperatives: An analysis of members' attitudes and behavior. *Canadian. Journal of Agricultural Economics/Revue Canadienne d'agroeconomie, 55*(3), 3 (Article).

Birchall, J. (2013). *Finance in an Age of Austerity: The Power of Customer-owned Banks*. Edward Elgar Publishing,.

Birchall, J., & Simmons, R. (2004). What motivates members to participate in co-operative and mutual businesses? *Annals of Public and Cooperative Economics, 75*(3), 3 (Article).

Bolton, R. N. (2011). Comment: Customer engagement: Opportunities and challenges for organizations. *Journal of Service Research, 14*(3), 3 (Article).

Briscoe, R., Grey, S., Hunt, T.P., Linehan, M., McBride, H., Tucker, V., & Ward, M., 1982, The Co-operative Idea, Cork, Ireland: Bank of Ireland Centre for Co-operative Studies, University College Cork.

Briscoe, R., & Ward, M.J. (2000). *The competitive advantages of co-operatives*. Centre for Co-operative Studies, National University of Ireland, Cork.

Briscoe, R., & Ward, M. J. (2005). *Helping Ourselves: Success Stories in Co-operative Business and Social Enterprise*. Cork, Ireland: Oak Tree Press,.

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research, 14*(3), 3 (Article).

Brown, L. H. (1985). Democracy in organizations: Membership participation and organizational characteristics in US retail food co-operatives. *Organization Studies, 6*(4), 4 (Article).

Buber, M. (1947). Between Man and man, trans. RG Smith, Kegan Paul, London.

Byrne, N. (2023). Cooperative Lifecycle Framing—Reinvention or Regeneration and Does It Matter? *Sustainability, 15*(7), 6181.

Byrne, N. (2022). Understanding co-operative identity through relationality. *Journal of Co-Operative Organization and Management, 10*(1), 1 (Article).

Byrne, N., Heinonen, K., & Jussila, I. (2015). The role of proximity in value preferences: A study of consumer co-operatives. *Annals of Public and Cooperative Economics, 86*(2), 2 (Article).

Byrne, N., & McCarthy, O. (2014). Value proposition preferences of credit union members and patronage activity. *International Journal of Bank Marketing*.

Byrne, N., McCarthy, O., & O'Shaughnessy, M. (2004). *A study of volunteerism in Irish credit unions and social enterprises*. Centre for Co-operative Studies, University College Cork.

Byrne, N., McCarthy, O., Ward, M., & McMurtry, J. (2012). Credit union restructuring: Don't forget the member! *International Journal of Co-Operative Management, 6*(1.1). Article 1.1.

Cechin, A., Bijman, J., Pascucci, S., Zylbersztajn, D., & Omta, O. (2013). Drivers of pro-active member participation in agricultural cooperatives: Evidence from Brazil. *Annals of Public and Cooperative Economics, 84*(4), 4 (Article).

Central Bank of Ireland Credit Union Regulators, 2016, Regulators presentation on credit union restructuring. In: Irish League of Credit Union's Annual General Meeting, Limerick.

Central Bank of Ireland Credit Union Regulators. 2018, Regulators presentation on credit union restructuring. In: Cork Chapter of Credit Unions, 21 June. Cork.

Central Bank of Ireland Report on the Financial Conditions of Credit Unions, December 2021, Central Bank Dublin, Ireland.

Centre for Co-operative Studies, 2012, *Submission on the draft general scheme of the Credit Union Bill*, 2012. Cork, Ireland: Centre for Co-operative Studies, University College Cork.

CUAC, 2016, *Review of implementation of the recommendations in the commission on credit unions report*. Dublin: CUAC.

Cipolla, C., & Manzini, E. (2009). Relational services. *Knowledge, Technology & Policy, 22*, 45–50.

Cook, M. L. (2018). A life cycle explanation of cooperative longevity. *Sustainability, 10*(5), 5 (Article).

De Freitas, C., & Martin, G. (2015). Inclusive public participation in health: Policy, practice and theoretical contributions to promote the involvement of marginalised groups in healthcare. *Social Science & Medicine, 135*, 31–39.

De Souza, D. E. (2013). Elaborating the Context-Mechanism-Outcome configuration (CMOc) in realist evaluation: A critical realist perspective. *Evaluation, 19*(2), 141–154.

Donati, P., & Archer, M. S. (2015). *The Relational Subject*. Cambridge University Press,.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*(3), 3 (Article).

Fairbairn, B. (2003). *Three strategic concepts for the guidance of co-operatives: Linkage, transparency, and cognition.*

Farmer, S. M., & Fedor, D. B. (1999). Volunteer participation and withdrawal. *Nonprofit Management and Leadership, 9*(4), 4 (Article).

Feller, J., Finnegan, P., & Nilsson, O. (2011). Open innovation and public administration: Transformational typologies and business model impacts. *European Journal of Information Systems, 20*(3), 3 (Article).

FitzPatrick, M., Varey, R. J., Grönroos, C., & Davey, J. (2015). Relationality in the service logic of value creation. *Journal of Services Marketing*.

Fletcher, R. (1976). WORKERS'CO-OPERATION. *Annals of Public and Cooperative Economics*, 47(2), Article 2.

Foss, N. J., Laursen, K., & Pedersen, T. (2011). Linking customer interaction and innovation: The mediating role of new organizational practices. *Organization Science, 22*(4), 4 (Article).

Franke, N., Keinz, P., & Klausberger, K. (2013). "Does this sound like a fair deal?": Antecedents and consequences of fairness expectations in the individual's decision to participate in firm innovation. *Organization Science, 24*(5), 5 (Article).

Fuglsang, L., & Pedersen, J. S. (2011). How common is public sector innovation and how similar is it to private sector innovation?. *Innovation in the Public Sector: Linking Capacity and Leadership* (pp. 44–60). Springer,.

Gardiner, M. (1996). Alterity and ethics: A dialogical perspective. *Theory, Culture & Society, 13*(2), 2 (Article).

Gebauer, H., Johnson, M., & Enquist, B. (2010). Value co-creation as a determinant of success in public transport services: A study of the Swiss Federal Railway operator (SBB). *Managing Service Quality: An International Journal, 20*(6), 6 (Article).

Gergen, K. J. (2009). *Relational Being: Beyond Self and Community*. Oxford University Press,.

Gill, L., White, L., & Cameron, I. D. (2011). Service co-creation in community-based aged healthcare. *Managing Service Quality: An International Journal, 21*(2), 2 (Article).

Gray, T.W., & Kraenzle, C.A. (1998). *Member participation in agricultural cooperatives: A regression and scale analysis.*

Grönroos, C. (1997). Value-driven relational marketing: From products to resources and competencies. *Journal of Marketing Management, 13*(5), 5 (Article).

Grönroos, C. (2006). On defining marketing: Finding a new roadmap for marketing. *Marketing Theory, 6*(4), 4 (Article).

Grönroos, C., & Gummerus, J. (2014). The service revolution and its marketing implications: Service logic vs service-dominant logic. *Managing Service Quality, 24*(3), 3 (Article).

Grönroos, C., & Voima, P. (2013). Critical service logic: Making sense of value creation and co-creation. *Journal of the Academy of Marketing Science, 41*, 133–150.

Gruen, T. W., Summers, J. O., & Acito, F. (2000). Relationship marketing activities, commitment, and membership behaviors in professional associations. *Journal of Marketing, 64*(3), 3 (Article).

Grünewald, C., Raasch, C., & Herstatt, C. (2012). *Selective openness, fairness and the motivation to contribute to open source software development*. DRUID Society Conference.

Heinonen, K., Strandvik, T., Mickelsson, K., Edvardsson, B., Sundström, E., & Andersson, P. (2010). A customer-dominant logic of service. *Journal of Service Management, 21*(4), 4 (Article).

Heinonen, K., Strandvik, T., & Voima, P. (2013). Customer dominant value formation in service. *European Business Review, 25*(2).

ICA, 1995, ⟨https://www.ica.coop/en/whats-co-op/co-operative-identity-values-principles⟩.

Jaakkola, E., & Alexander, M. (2014). The role of customer engagement behavior in value co-creation: A service system perspective. *Journal of Service Research, 17*(3), 3 (Article).

Jones, P.A., Money, N., & Swoboda, R. (2017). *The Irish Credit Union Business Model: Is it still fit for purpose?*

Jussila, I., Byrne, N., & Tuominen, H. (2012). Affective commitment in co-operative organizations: What makes members want to stay? *International Business Research, 5*(10).

Jussila, I., Roessl, D., & Tuominen, T. (2014). Should I stay or should I go? Normative member commitment in co-operatives. *International Journal of Marketing Studies, 6*(6), 26.

Jussila, I., Goel, S., & Tuominen, H. (2012a). Member commitment in co-operatives: The utilitarian approach. *Business and Management Research, 1*(3), 9–16.

Jussila, I., Tuominen, P., & Tuominen, T. (2012b). Are we owners or regular customers? The obscure meaning of ownership in consumer co-operatives. *International Business Research, 5*(12), 195.

Karafolas, S. (2016). *Credit Cooperative Institutions in European Countries*. Springer,.

Kleinbaum, D. G., Klein, M., Kleinbaum, D. G., & Klein, M. (2010). Assessing discriminatory performance of a binary logistic model: ROC curves. *Logistic Regression: A Self-Learning Text*, 345–387.

Klijn, E.-H., & Koppenjan, J. F. (2000). Politicians and interactive decision making: Institutional spoilsports or playmakers. *Public Administration, 78*(2), 2 (Article).

Lapoutte, A. (2020). The problem is the solution: Can permaculture management regenerate social economy enterprises? *Annals of Public and Cooperative Economics, 91*(3).

Levinas, E. (1989). *The levinas reader*.

Linell, P. (2009). *Rethinking language, mind, and world dialogically*. IAP.

McCarthy, O. (1996). *A history and development of Ballyphehane Credit Union 1960–1994*. Centre for Co-operative Studies, National University of Ireland.

McCarthy, O., Farrell, S., & Hewson, D. (2016). The financial co-operative system in Ireland. *Credit Cooperative Institutions in European Countries*, 127–147.

McKillop, D. G., & Quinn, B. (2017). Irish credit unions: Differential regulation based on business model complexity. *The British Accounting Review, 49*(2).

McNamee, S., & Gergen, K. J. (1999). Relational responsibility: Resources for sustainable dialogue. *Sage*.

Mooney, P., & Gray, T.W. (2002). *Cooperative conversion and restructuring in theory and practice.*

Ntrinias, T., 2016, Change in co-operative organisations: The case of Greek pharmaceutical co-operatives. University of Salford (United Kingdom).

Ole Borgen, S. (2001). Identification as a trust-generating mechanism in cooperatives. *Annals of Public and Cooperative Economics, 72*(2), 2 (Article).

Olsson, A. K. (2012). Spatial aspects of member retention, participation and co-creation in tourism settings. *International Journal of Nonprofit and Voluntary Sector Marketing, 17*(3).

O'Malley, L., & Tynan, C. (2000). Relationship marketing in consumer markets–rhetoric or reality? *European Journal of Marketing, 34*(7).

Österberg, P., & Nilsson, J. (2009). Members' perception of their participation in the governance of cooperatives: The key to trust and commitment in agricultural cooperatives. *Agribusiness: An International Journal, 25*(2).

Pestoff, V. (2006). Citizens and co-production of welfare services: Childcare in eight European countries. *Public Management Review, 8*(4), 503–519.

Pestoff, V. (2009). Towards a paradigm of democratic participation: Citizen participation and co-production of personal social services in Sweden. *Annals of Public and Cooperative Economics, 80*(2).

Pestoff, V. (2012). Co-production and third sector social services in Europe: Some concepts and evidence. *Voluntas: International Journal of Voluntary and Nonprofit Organizations, 23*, 1102–1118.

Pestoff, V. (2010). *The Role of Volunteering and Co-production in the Provision of Social Services in Europe*. Istanbul: ISTR Conference paper,.

Power, C., O'Connor, R., McCarthy, O., & Ward, M. (2011). *The Origins, Ethos and Evolution of Cooperative Credit in Ireland: Celebrating the Centenary of the Birth of Nora Herlihy*. Cork: Centre for Co-operative Studies and Duhallow Women's Forum.

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing, 18*(3), 3 (Article).

Rosenbaum, M. S., & Massiah, C. A. (2007). When customers receive support from other customers: Exploring the influence of intercustomer social support on customer voluntary performance. *Journal of Service Research, 9*(3), 3 (Article).

Shotter, J. (2008). Dialogism and polyphony in organizing theorizing in organization studies: Action guiding anticipations and the continuous creation of novelty. *Organization Studies, 29*(4), 501–524.

Simmons, R., & Birchall, J. (2007). Tenant participation and social housing in the UK: applying a theoretical model. *Housing Studies, 22*(4), 4 (Article).

Story, D. C. (1992). Volunteerism: The" self-regarding" and" other-regarding" aspects of the human spirit. *Nonprofit and Voluntary Sector Quarterly, 21*(1), 1 (Article).

Stryjan, Y. (1993). Cooperatives in a changing world. Membership and adaptation in Swedish farmer cooperation. *Rapport-Sveriges Lantbruksuniversitet, Institutionen Foer Ekonomi (Sweden)*.

Stryjan, Y. (1994). Understanding cooperatives: The reproduction perspective. *Annals of Public and Cooperative Economics, 65*(1), 1 (Article).

Suter, P., & Gmür, M. (2013). *Member value in co-operatives*. Université de Fribourg.

Talonen, A., Jussila, I., Saarijärvi, H., & Rintamäki, T. (2016). Consumer cooperatives: Uncovering the value potential of customer ownership. *AMS Review, 6*, 142–156.

Talonen, A. P., Jussila, I., Tuominen, P., & Koskinen, L. (2018). Failing to develop a sense of ownership: A study in the consumer co-operative context. *Cogent Business & Management, 5*(1), 1540916.

Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science, 36*(1). https://doi.org/10.1007/s11747-007-0069-6. Article 1.

Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: embarking on the social innovation journey. *Public Management Review, 17*(9). https://doi.org/10.1080/14719037.2014.930505. Article 9.

West, J., & O'Mahony, S. (2008). The role of participation architecture in growing sponsored open source communities. *Industry and Innovation, 15*(2). https://doi.org/10.1080/13662710801970142. Article 2.

Zampetakis, L. A., Beldekos, P., & Moustakis, V. S. (2009). Day-to-day" entrepreneurship within organisations: The role of trait Emotional Intelligence and Perceived Organisational Support. *European Management Journal, 27*(3). https://doi.org/10.1016/j.emj.2008.08.003. Article 3.