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MEMBER PSYCHOLOGICAL OWNERSHIP AND SUSTAINABILITY OF URBAN PRIMARY CONSUMER COOPERATIVE SOCIETIES IN ETHIOPIA

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Abstract

This research analyses the relationship between psychological ownership and sustainability of urban primary consumer cooperatives operating in Ethiopia. In Ethiopia the concept of psychological ownership is not well studied especially on cooperatives. This study attempts to fill the gap by analyzing the relationship between member psychological ownership and sustainability of urban primary consumer cooperatives. Member psychological ownership was measured using member accountability, self-efficacy, sense of place/belongingness, self-identity and territoriality. Current study employed a survey research design to investigate the hypothesized relationships. Data were collected from 384 randomly selected members of urban primary consumer cooperatives in Bahir Dar, Adama, and Addis Ababa using a two-stage cluster sampling procedure, representing a target population of 118,538 members across 275 cooperatives. Structural Equation Modeling (SEM) served as the primary data analysis technique. SEM allowed for the assessment of the direct relationships between member psychological ownership – measured through dimensions of accountability, self-efficacy, sense of place/belongingness, self-identity, and territoriality – and the sustainability of these cooperatives. Results revealed positive significant relationship between member psychological ownership and sustainability of urban primary consumer cooperatives. These findings highlight the practical importance of fostering a strong sense of ownership among members.

Keywords: Consumer Cooperative; Psychological Ownership; Accountability; Self-Efficacy; Sense of Place/Belongingness; Self-Identity; Territoriality; SEM.

1. INTRODUCTION

Cooperative societies are owned by their members. A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise [1]. Member-owners finance the cooperative's assets and have the obligation to provide financing in accordance with their use to keep the cooperative in business and permit it to grow. Control overall operations and activities of the cooperative, and member-owners are the primary beneficiaries from their cooperatives but as per their use [2]. Therefore, the mission of cooperatives is to unite and involve its members in an economic and social community to provide countervailing market power and access to economic and social resources that they otherwise cannot get [3].

Members have the right to participate in decision making and governance processes of their cooperatives [4]. Tak [5] studied cooperatives have superior performance of

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productivity, job satisfaction and technical efficiency due to their distinctive features of member ownership and democratic participation in decision making. Filley (1929), as cited in [4], claimed that during times of social, economic, environmental and political upheaval cooperatives have the potential to lift us up. Similarly, [6] indicated during times of crisis cooperatives provide greater job security. The ICA-Ap [7] conference also emphasized sustainable cooperatives are built through enhanced member participation and engagement. As entities cooperative societies have a developable capacity to rebound or bounce back (from adversity, conflict and failure or even positive events, and progress and increase responsibility) and can create economic value, healthy ecosystems and strong communities. Sustainable entities survived over the long term because they are intimately connected to healthy economic, social and environmental systems [8].

Moreover, [3] studied cooperatives societies have the potential to establish unusually strong linkages with members due to their role as users and owners. This strong linkage motivates members to develop psychological ownership towards their cooperative societies. Jussila and Touminen [9] studied that investment of personal resources, their intimacy with and control over their cooperatives led members to develop psychological ownership. Birchall [10] also studied that active member participation in consumer cooperatives was the crucial factor that brough postwar success of the cooperative sector in Japan. In addition, Lewis [11] indicated one of the causes of failure of consumer cooperatives is due to lack of patronage and support by members. Therefore, this research attempted to study the relationship between member psychological ownership and the sustainability of urban primary consumer cooperatives during periods of inflation-induced volatile market conditions in Ethiopia.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Psychological ownership captures the feeling of "having" something, not necessarily in a material sense, but rather as an intrinsic part of oneself. Pierce et al. [12] defined psychological ownership as “a state of mind in which individuals feel as though the target of ownership or a piece of that target is 'theirs'.” This definition emphasizes not only emotional possession of people but also their sense of responsibility associated with ownership. Psychological ownership reflects an individual’s awareness, thoughts and beliefs regarding the target of ownership. Generally, psychological ownership encompasses a complex interplay of cognitive, affective and behavioral components than simply feeling like something belongs to someone [13].

Psychological ownership is a complex phenomenon built upon a confluence of factors that constantly interact to shape our sense of possession. Self-investment, intimate knowledge and perceived control are regarded as key factors that play pivotal roles in the development or experience of psychological ownership. Self-investment is exhibited through the amount of time, energy and skill dedicated towards the object of ownership [14]. In organizations individuals who invest their skills, knowledge and personal

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resources into their work develop a stronger sense of ownership over their tasks, projects and organizational goals [15].

Emphasizing intimate knowledge Pierce et al. [15] stated individuals who have familiarity with or expertise over entities are more likely to feel sense of ownership over them. In addition, Van Dyne and Pierce [16] explored that individuals are more likely to develop feelings of psychological ownership over objects that are physically proximate and easily accessible to them. Further, Jussila et al. [17] studied that individuals who exercise control over objects or entities through participation in decision-making are likely to develop psychological ownership towards that object/entity. To conclude, psychological ownership is a state of mind in which individuals feel possession and responsibility towards a target. Individuals develop this feeling if they invest themselves towards the target, have good intimate knowledge of the target and develop perceived control over it.

2.1 Dimensions of psychological ownership

Different known scholars have identified various dimensions of psychological ownership in their seminal works. A few of identified dimensions include sense of control, identity, accountability and responsibility, territoriality and self-efficacy, investment, attachment, intimacy and sense of belongingness [15], [12], [16], [19], [21], [22], [20]. These dimensions are organized in to two distinct yet interconnected facets of psychological ownership: Promotion-focused dimensions and Prevention-focused dimension.

Promotion-focused psychological ownership revolves around aspirations for growth, advancement and enhancement of resources or domains of ownership. In contrast, prevention-focused psychological ownership entails a focus on maintaining stability, security and protection over owned objects or entities. Promotion-focused dimensions include accountability, self-efficacy, sense of place/belonginess and self-identity while territoriality is the only preventive-oriented dimension [23]. This study explores the relationship between the psychological ownership of members and the sustainability of urban primary consumer cooperatives in Ethiopia during inflationary and volatile market conditions. It achieves this by examining all five identified dimensions of psychological ownership. Henceforth, "member" precedes all five dimensions to identify target cooperative societies members.

2.1.1 Member accountability

Accountability or responsibility is identified as Individuals feel a sense of responsibility towards objects or entities they perceive as their own that encourages to greater care, maintenance and commitment. It can be understood in two perspectives: the expected right to hold others accountable for their contributions and the expectation of being held accountable personal actions and decisions [18]. Avey et al. [23] argued that individuals are more likely to feel more accountable when they invest themselves to the success of the target object. Nurtjahjani et al. [24] also studied individuals who feel an object as part of their extended-self demonstrated higher sense of responsibility.

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Fundamental cooperative values of self-help, self-responsibility and solidarity put responsibilities on members both individually and as a group. Members are required to be responsible and play their duties on their own with no additional/external incentive. In short, responsibilities of members in cooperatives are to use, control and finance them. Using services of cooperatives is the easiest responsibility so that cooperatives can at least be able to cover the operating cost. During the short-term members need to purchase from their cooperatives even if prices are less elsewhere. Further, as owner-members they are responsible to approve (and change) articles of incorporation, bylaws and major policies; to sign marketing agreements and other binding contracts; to elect directors according to state statute and cooperative bylaws; to vote on significant actions affecting the cooperative's legal status, if necessary, to dissolve it; and to ensure the cooperative follows general business laws and those unique to cooperatives. Lastly, members are responsible to finance their cooperative by investing on shares and allowing cooperatives part of its annual surplus for expansion [2]. Generally, they are responsible to form a unified organization where members support one another [25]. Accordingly, the following hypothesis was proposed.

H_{01}: Member accountability has positive and significant relationship with sustainability of urban primary consumer cooperative societies.

2.1.2 Member self-efficacy

Self-efficacy is identified as the belief of individuals in their ability to organize and accomplish required tasks to achieve goals [26], [27]. Narcikara [28] stated that self-efficacy motivates people to exercise control over a target which gives the pleasure of owning the same. Van Dyne and Pierce [16] studied employees with higher levels of self-efficacy were more likely to exhibit feelings of possession and attachment toward their work-related tasks and responsibilities. In addition, Pierce and Jussila [19] concluded teams with members who have high levels of self-efficacy are more likely to develop a shared sense of ownership over common goals and objectives.

Research suggested consumer cooperatives long term success and sustainability is hinged to member self-efficacy. Talonen et al. [29] indicated that ability of members to participate in decision making and control of their cooperatives enables them to have as a sense of ownership towards them. Moreover, a strong sense of self-efficacy motivates members to fulfill their financial obligations to the cooperative. Cooperatives members have the responsibility to contribute capital by buying equity shares and they have the right to democratically control cooperatives' equity capital. Moreover, they also share profits based on their transactional participation [30]. As a result, the following hypothesis was established.

H_{02}: Member self-efficacy has positive and significant relationship with sustainability of urban primary consumer cooperative societies.

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2.1.3 Member self-identity

Self-identity plays a crucial role in shaping psychological ownership in both organizational and consumer contexts. In the workplace self-identity contributes to the formation of psychological ownership in the way if workers identify themselves with their work roles and responsibilities, they are more likely to develop a sense of ownership over their tasks and organizational goals [18]. In addition, Peck and Shu [21] indicated that consumers who perceive products as congruent with their self-image are more likely to feel a sense of ownership over those products. Further, Roccas et al. [31] found that identification of individuals with social groups influences their sense of ownership over group resources and goals.

Bentsen [32] stated that in cooperatives member self-identity can be achieved through increased participation in exercising member voting rights. In addition, there is a strong tendency of developing member self-identity with their cooperatives due to their member-owner status and ability to influence decisions [3]. Further, Wadesango and Mabunda [33] claimed that success and failure of cooperatives are related with the level of identity they have with their cooperatives. Therefore, it is believed that self-identity of members is related to sustainability of cooperative societies. Hence, the following hypothesis was established:

H_{03}: Member self-identity has positive and significant relationship with sustainability of urban primary consumer cooperative societies.

2.1.4 Member sense of place/belongingness

The sense of place or belongingness influences perceptions of ownership of individuals and their emotional connection to places and groups. Social Identity theory discusses individuals derive a sense of belongingness and self-esteem from their membership in social groups [34]. Lewicka [35] demonstrated that residents who feel a strong sense of belongingness to their neighborhoods are more likely to perceive ownership over public spaces and amenities within those neighborhoods. Further, within organizational contexts employees who feel a strong sense of place or belongingness to their organization are more likely to perceive ownership over organizational goals and resources [15].

Within cooperative societies, a member's sense of belonging is demonstrated through their attitudes, specifically their commitment, dedication, and responsibility. Member sense of place in cooperatives is dependent of the quality of services delivered at reasonable prices. In addition, members who feel a sense of belongingness are more likely to actively participate in their cooperatives [36]. In Addition, study indicated that members in cooperatives who lacked a sense of belonging were less committed to the cooperative's goals [37]. Accordingly, the following hypothesis was established:

H_{04}: Member Sense of place/Belongingness has positive and significant relationship with sustainability of urban primary consumer cooperative societies.

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2.1.5 Member territoriality

Territoriality is often conceptualized as the marking and defense of space or boundaries. Goldenberg and Haines have described the concept of territory as being the result of social interactions converging in a geographic area with specific ties [38]. On the hand, Brown et al. [39] defined territoriality as an individual's behavioral expression of his or her feelings of ownership toward a physical or social object. Therefore, territoriality can be understood as a defense of space/boundaries and as a feeling of ownership.

In organizational settings employees who exhibited territorial behaviors such as personalizing their workspace or defending their tasks reported stronger feelings of possession and attachment to their work-related responsibilities [16]. Further, Peck and Shu [21] demonstrated that individuals tend to exhibit territorial behaviors such as physically touching or manipulating products to establish a sense of ownership over them. Moreover, Roccas et al. [31] studied that territorial behaviors of individuals within social groups influence their sense of belongingness and identity within the group. In addition, [40] studied that territorial behavior as a dimension of psychological ownership have positive within groups and negative intergroup outcomes.

An individual's need of self-identity and a sense of place in a target entity stimulates territorial behavior [39]. In the world of cooperatives two of the seven universally accepted principles viz. voluntary and open membership and member democratic control can be associated with the concept of territoriality. According to voluntary open membership principle anyone can apply for membership as long as he/she can qualify for the registration criteria for membership [1]. Inclination of members to block new member entry may trigger external hostility to cooperatives since applicants may interpret their actions that 'this is my cooperative, not yours' [39]. The member control principle establishes a system where members govern the cooperative by controlling management and the overall process. Generally, the former triggers external enmity while the later encourages collective defense of their cooperative from any form of internal exploitation. Therefore, as a psychological ownership concept territoriality can have mixed relationship with sustainability of cooperatives. Considering arguments discussed above the following hypothesis was established:

H_{05}: Member territoriality has positive and significant relationship with sustainability of urban primary consumer cooperative societies.

3. RESEARCH METHODOLOGY

3.1 Sample and procedure

The study was undertaken based on data collected through questionnaire distributed to randomly selected respondents. Data analysis was conducted using Structural Equation Modeling (SEM). In SEM a variety of statistical approaches are utilized to estimate the extent and orientation of hypothesized causal relationships in quantitative research. It analyzes manifest variables as indicators for target latent constructs and also uses to estimate causal relationships among latent constructs [41]. SEM has two parts:

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measurement model and structural model. The former is used to deal with measurement related issues whereas the latter is used to evaluate the relationship between exogenous and endogenous latent constructs of the SEM.

3.1.1 Sampling

Researcher distributed questionnaires directly to respondents, who then completed them independently. They were randomly selected among members of target urban primary consumer cooperative societies operating in Bahir Dar, Adama and Addis Ababa cities of Ethiopia. Bahir Dar is the biggest and the capital city of Amhara region and Adama is the second biggest city in Oromia region. Addis Ababa is the capital city of Ethiopia. Adama is selected due to the fact that capital of regional government of Oromia has moved to Addis Ababa.

The total number of respondents was 384. All of them were selected from a target population of 118,538 members of 275 primary consumer cooperative societies operating in selected cities using a two-stage random cluster sampling. Sample size was determined at 5% level of significance using the Krejcie and Morgan sample size determination formula [42]. Demographic analysis indicated that Women and men constituted 49.50 and 50.50 per cents respectively. Their age distribution indicated 54% between 18 to 35 years, 42% between 36 to 50 years and only 4% were above 50 years old. Respondents were 76% married, 21% unmarried and remaining 3% were either widowed or divorced/separated. Further, 58% per cent of respondents were heads of their families. In addition, based on educational status 2% of them did not complete 10th/12th grade and 7% completed 10th/12th grade only. Moreover, 57% of respondents were bachelor degree holders and only 6% and 1% of them were masters degree and PhD holders respectively.

3.1.2 Instrument

To measure psychological ownership of members towards their primary consumer cooperatives the five dimensions and 16-items scale developed by [23] was employed. In addition, to evaluate sustainability of consumer cooperatives a sixth variable with 5-items was included. Totally, the research questionnaire administered comprised six variables and 21 items. Variables used are member territoriality (MTR) (4-items), member self-efficacy (MSE) (3-items), member accountability (MAC) (3-items), member sense of place/belongingness (MSB) (3-items), member self-identity (MSI) (3-items) and Consumer Cooperative Sustainability (CCS) (5-items). Each item was measured on a 6-point Likert Scale that ranges from ‘strongly disagree =1’ to ‘strongly agree = 6’.

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Table 1: Descriptive Statistics and Cronbach's alpha

Variables	Mean	Std. Deviation	Cronbach's Alpha
MTR	4.386	1.037	0.820
MSE	4.223	0.943	0.786
MAC	4.403	1.037	0.813
MSI	4.194	0.902	0.758
MSB	4.355	0.945	0.750
CCS	4.184	0.817	0.830
Overall	4.285	0.942	0.898
Source: Author			

Descriptive statistics (means and standard deviations) and Cronbach's alpha of each construct is presented in Table 1. Cronbach's alpha is one of widely used measures of instrument reliability. Cheung et al. [43] discussed a Cronbach's alpha coefficient of 0.70 is widely used as the standard reliability though a coefficient of 0.80 is recommended as a measure of adequate reliability for a majority of studies. Accordingly, Cronbach's alpha coefficients for MSE, MSI and MSB were estimated 0.786, 0.758 and 0.750 respectively and for MTR, MAC and CCS 0.820, 0.813 and 0.830 respectively. Thus, all variables were estimated to have above 0.70 Cronbach's alpha values and three of them above 0.80 alpha coefficients. Thus, it was confirmed that all constructs of the instrument had adequate reliability.

4. DATA ANALYSIS

4.1 Preliminary analysis

To determine both discriminant and convergent validity, data was examined using Principal Component Analysis (PCA) and Confirmatory Factor Analysis (CFA). First, Kaiser-Meyer- Olkin (KMO) test of sample adequacy and Bartlett's test sphericity was checked. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was significant ($p < 0.01$), with a value of 0.896, supporting the instrument's suitability for factor analysis (Table 2). Field [44] pointed out appropriateness of sampling adequacy for factor analysis based on KMO values as mediocre (0.5 to 0.7), good (0.7 to 0.8), great (0.8 to 0.9) superb (above 0.90). The Bartlett's test of sphericity confirmed significant correlations among variables ($p < 0.05$), justifying the use of factor analysis in this study. Bartlett's test of sphericity evaluates the null hypothesis (H_0) that the correlation matrix (Σ) is an identity matrix ($\Sigma = I$), indicating no underlying factor structure. A statistically significant result ($p < 0.05$) rejects H_0, suggesting significant correlations among variables, which is a prerequisite for factor analysis to identify meaningful latent factors [45].

Table 2: Kaiser-Meyer-Olkin (KMO) and bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.896
Bartlett's Test of Sphericity	Approx. Chi-Square	3291.461
	Df	210
	Sig.	0.000
Source: Author		

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Then, PCA analysis was conducted using varimax rotation with Kaiser normalization. Six factors were retained based on Kaiser's criterion that states reliable and meaningful factors can be retained if their eigen values are greater than one [46] (table 3). The item-factor loading cut-off point was set at 0.30 which often serves as a cutoff point. As a rule of thumb, items/variables with loadings above 0.32 are included and interpreted in to a factor [47]. Further, there was no item-factor cross loading.

Table 3: Rotated principal component matrix[a]

Variables	Component					
	CCS	MTR	MAC	MSE	MSI	MSB
CCS _5	.783	.030	.089	.142	.163	.082
CCS _3	.773	.185	.157	.122	.124	.140
CCS _1	.728	.184	.049	.100	.114	.199
CCS _4	.660	.200	.213	.107	.161	.078
CCS _2	.572	.137	.203	.176	.163	.195
MTR_2	.103	.837	-.030	.145	.128	.087
MTR_1	.158	.787	.121	.140	.114	.019
MTR_3	.212	.716	.100	.246	.074	.094
MTR_4	.159	.636	.109	.227	.234	.105
MAC_3	.143	.074	.856	.088	.039	.114
MAC_1	.180	.032	.794	.044	.114	.192
MAC_2	.167	.121	.778	.012	.133	.150
MSE_1	.140	.208	.085	.811	.131	.075
MSE_3	.160	.201	-.029	.782	.141	.122
MSE_2	.204	.268	.102	.710	.122	.063
MSI_3	.199	.120	.067	.154	.820	.111
MSI_1	.164	.229	.059	.150	.764	.072
MSI_2	.213	.130	.185	.089	.663	.183
MSB_1	.164	.030	.042	.098	.174	.854
MSB_2	.163	.078	.232	.133	.185	.705
MSB_3	.227	.172	.295	.034	-.003	.687

Notes: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

source: Author

Furthermore, retained factors were able to explain an acceptable 67.22% of the total variance (Table 4). For social science studies an above 50 to 60% total variance explained value is adequate [48], [49]. In addition, all items of each retained factor but one had above 0.50 communality values.

Communality represents the proportion of the variable/item that is not attributed to the variable/item's uniqueness which is conceptualized as the sum of the specific variance and error variance. In other words, it is the proportion or percentage of variance in a measured variable/item that is useful in defining the canonical solution [50]. Bruce Thompson [45] also stated communality coefficients around 0.50 are adequate for larger sample size studies.

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Table 4: Total variance explained

Principal Compo-nent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumul-ative %	Total	% of Variance	Cumul-ative %	Total	% of Variance	Cumul-ative %
CCS	7.094	33.782	33.782	7.094	33.782	33.782	2.995	14.26	14.26
MTR	2.199	10.47	44.252	2.199	10.47	44.252	2.661	12.67	26.931
MAC	1.389	6.614	50.866	1.389	6.614	50.866	2.33	11.096	38.027
MSE	1.238	5.895	56.761	1.238	5.895	56.761	2.106	10.028	48.055
MSI	1.141	5.434	62.195	1.141	5.434	62.195	2.04	9.714	57.768
MSB	1.055	5.026	67.221	1.055	5.026	67.221	1.985	9.452	67.221
Extraction Method: Principal Component Analysis.									
Source: Author									

4.2 Structural equation modeling (SEM) analysis

4.2.1 Measurement model

Measurement model is the first part of Structural Equation Modeling (SEM). CFA was done to examine both convergent and divergent validity. The purpose of CFA is to confirm whether there is validity issue in the hypothesized measurement model. IBM SPSS.Amos.24 was used for analysis. Fig. 1 shows SEM measurement model of the study.

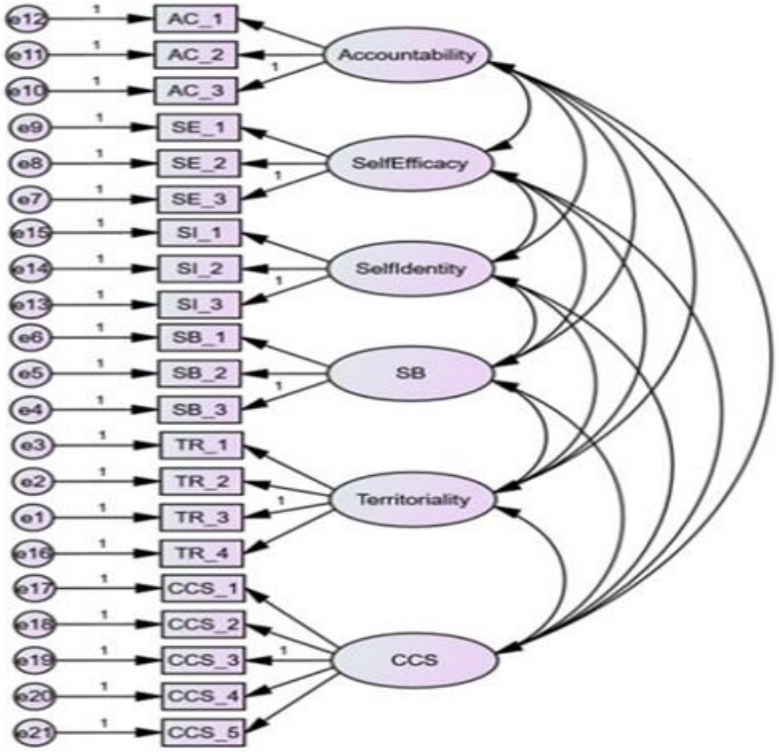

Figure 1: Measurement Model

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First, tests of multivariate outliers, data normality, Common Method Bias (CMB) and goodness-of-fit were conducted. Outliers refer cases where its scores are substantially different from all other cases in a particular dataset. Usually, the Mahalanobis Distance (D2) is computed for each case to detect the presence of multivariate outliers. Multivariate Outliers represent cases that have extreme values with reference to multiple variables. Cases with the highest Mahalanobis Distance (D2) are the most likely candidates for existence of multivariate outliers in a dataset [51]. Analysis of results of the study indicated no presence of multivariate outliers in this research. Further, normality of data was investigated using values of skewness and kurtosis. Garson [52] indicated that both skewness and kurtosis values that fall in the range -2/+2 show normality of data. Analysis of results indicated skewness and kurtosis values fell in the range between -0.664 to -0.185 and -0.803 to 0.383 respectively. Thus, study data was normally distributed.

Common Method Bias (CMB) test was also performed using Herman's single factor analysis. According to Herman's single factor test presence of CMB is assumed if all items of an instrument load to one general factor and whether the majority of the variance can be explained by the general factor [53]. Results showed all items loading to a single general factor had only a 30.52% total explained variance. This reflects absence of Common Method Bias (CMB) in this study. In addition, model goodness-of-fit tests explained that hypothesized measurement model satisfied required suggested standard indices [54], [55], [56], [57]. It was found that chi-square value/degrees of freedom (CMIN/DF) =1.588 ≤ 3, goodness-of-fit index (GFI) = 0.937 ≥ 0.90, Adjusted goodness-of-fit index (AGFI) = 0.916 ≥ 0.90, comparative fit index (CFI) = 0.968 ≥ 0.90, parsimony goodness-of-fit index (PGFI) = 0.706 ≥ 0.50, root mean square residual (RMR) = 0.040 ≤ 0.05, Standardized root mean square residual (SRMR) = 0.043 ≤ 0.05 and root mean square error of approximation (RMSEA) = 0.039 ≤ 0.05. Thus, it is confirmed that all parameters indicated presence of model goodness-of-fit.

Then, the hypothesized measurement model underwent evaluation for measurement error using tests of convergent and discriminant validity. Convergent validity is typically assessed by examining factor loadings, average variance extracted (AVE) and composite reliability (CR). Common thresholds suggest acceptable convergent validity when each factor loading is greater than 0.5, AVE is above 0.5, and CR exceeds 0.7 [58], [59], [60]. However, Kline [41] suggested factor loadings slightly below 0.5 might be acceptable if the corresponding AVE remains higher than 0.5. The Confirmatory Factor Analysis (CFA) results presented in Table 5 demonstrate strong convergent validity. This is because both Average Variance Extracted (AVE) and Composite Reliability (CR) values exceed the recommended thresholds of 0.50 and 0.70, respectively, for all variables. Additionally, CR values are consistently higher than their corresponding AVE coefficients, further supporting the internal consistency of the measurement model. Next, discriminant validity was confirmed using the Fornell-Larcker criterion [58]. This criterion suggests that discriminant validity is achieved if the square root of each construct's AVE is greater than its inter-construct correlation coefficients. As shown in Table 5, all square root values of AVE were indeed higher than their corresponding correlations, indicating good discriminant validity. Hence, findings support both convergent and discriminant validity,

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indicating the measures accurately capture the intended constructs and effectively differentiate them from each other.

Table 5: Convergent and Discriminant Validity

Principal components	CR	AVE	MSI	MTR	MSE	MAC	MSB	CCS
MSI	0.834	0.503	0.709*					
MTR	0.824	0.539	0.539	0.734*				
MSE	0.754	0.506	0.588	0.372	0.711*			
MAC	0.788	0.553	0.537	0.660	0.398	0.744*		
MSB	0.818	0.600	0.501	0.298	0.556	0.260	0.775*	
CCS	0.766	0.524	0.589	0.529	0.494	0.526	0.363	0.724*
Note: CR - Composite reliability, AVE - average variance explained and * - square-root of AVE								
Source: Author								

4.2.2 Structural model

Structural Equation Modeling (SEM) was used to test hypothesized relationships. The core component of the SEM is the structural model. In this study the structural model established the relationship between exogenous latent variables (member self-efficacy, member accountability, member sense of place/belongingness and member self-identity) and the endogenous variable (urban primary consumer cooperative sustainability). IBM SPSS.Amos.24.0 was used for analysis. Fig. 2 shows SEM structural model of the study.

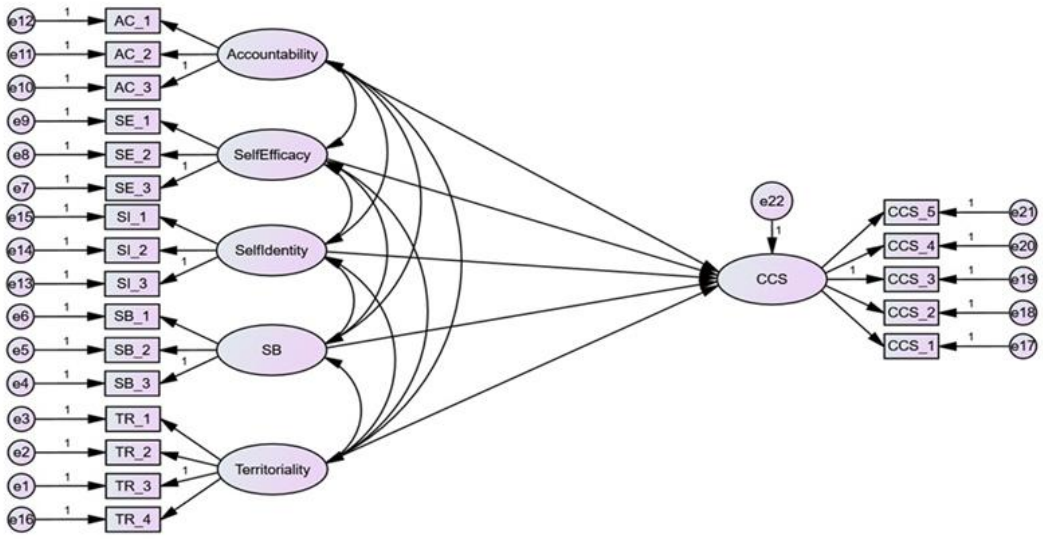

Figure 2: Structural Model

Fit indices for the structural model indicated good overall fit. All indices fell within the recommended ranges for acceptable model fit. Test results showed chi-square value/degrees of freedom (CMIN/DF) =1.588 ≤ 3, goodness-of-fit index (GFI) = 0.937 ≥ 0.90, Adjusted goodness- of-fit index (AGFI) = 0.916 ≥ 0.90, comparative fit index (CFI) = 0.968 ≥ 0.90, parsimony goodness-of-fit index (PGFI) = 0.706 ≥ 0.50, root mean square residual (RMR) = 0.040 ≤ 0.05 and root mean square error of approximation (RMSEA) =

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0.039 ≤ 0.05. Therefore, hypothesis testing using path coefficients of the structural model was allowed and, hence, undertaken. All factors and regression weights covariances among each other were statistically significant (P<0.05).

Path analysis of the structural model test showed all of the five exogenous factors have positive significant relationship with sustainability of urban primary consumer cooperative societies (Table 6). Member accountability showed positive significant relationship with sustainability of urban primary cooperative societies (SE=0.192, t-value=3.037 and p-value= 0.002). Hence, H1 was supported. Similarly, member self-efficacy is confirmed having positive significant relationship with sustainability of urban primary cooperative societies (SE=0.163, t-value=2.095 and p-value=0.036). Thus, H2 was supported. The third factor which is member self-identity also showed positive significant relationship with sustainability of urban primary consumer cooperative societies (SE=0.227, t-value=3.187 and p- value=0.001). Sustainability of urban primary consumer cooperative societies (SE=0.227, t-value=3.187 and p-value=0.001). Hence, H3 was supported.

Table 6: SEM regression coefficients

	Relationship		Standardized Estimate (SE)	t-value	P-value	Decision
H10	Member Accountability →	Urban Primary Consumer Sustainability	0.192	3.037	0.002	Supported
H20	Member Self-efficacy →	Urban Primary Consumer Sustainability	0.163	2.095	0.036	Supported
H30	Member Self-identity →	Urban Primary Consumer Sustainability	0.227	3.187	0.001	Supported
H40	Member Sense of Place/Belongingness →	Urban Primary Consumer Sustainability	0.244	3.265	0.001	Supported
H50	Member Territoriality →	Urban Primary Consumer Sustainability	0.163	2.165	0.030	Supported
Note: P<0.05						
Source: Author						

Further, the fourth factor which is member sense of place/belongingness also showed positive significant relationship with sustainability of urban primary cooperative societies (SE=0.244, t-value=3.265 and p-value=0.001). Thus, H4 was supported. The last factor, member territoriality, also indicated positive significant relationship with sustainability of urban primary cooperative societies (SE=0.163, t-value=2.165, and p-value=0.030). Hence, H5 was supported. Overall, findings indicated that the structural SEM model has a good explanatory power (R^2=54.80%). This means psychological ownership latent

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variables were able to estimate 54.80% of the total variation in sustainability of urban primary consumer cooperatives.

5. DISCUSSION

This study investigated the relationship between five dimensions of member psychological ownership and the sustainability of urban primary consumer cooperatives in Ethiopia. The research, conducted during a period of inflation-driven market volatility (a condition Ethiopia has faced since recent years), aimed to evaluate whether members sense of psychological ownership, measured across five dimensions, relate to the sustainability of these cooperatives.

Findings of the study highlighted that member sense of place/belongingness is the most important dimension that is related to sustainability of urban primary consumer cooperative societies. This means members need to feel they belong to and are comfortable with their cooperatives. Further, they need to feel their cooperatives as their own homes which are struggling to thrive through testing times. Member self-identity is the next prominent dimension that is related to sustainability of the target. It means that members need to feel their membership defines who they are and need to feel their cooperative success as equivalent as their individual success.

In addition, they should be willing to defend criticisms on their cooperatives regardless in whatever situations they are in. The study also indicated the third important dimension that relates to consumer cooperative sustainability is member accountability. This means during periods of inflation-induced volatile market conditions members need to develop the courage to challenge anyone if something get wrong in the cooperatives and they also need to not be hesitant to tell their cooperatives if they saw something was done wrong. The fourth and fifth dimensions were found to have comparable importance.

Member self-efficacy was found equally important as member territoriality to sustainability. Relating to self-efficacy members need to develop the confidence on their abilities that they can set high performance goals, contribute to the success and bring a positive difference in their cooperatives so that they can always be ready to help sustainability of their organizations when an opportunity comes out. Lastly, study findings showed that member territoriality dimension is also positively related to sustainability of urban primary consumer cooperatives.

In this regard, it is worth noting that members need to protect properties and, beneficial ideas and projects of their cooperatives from being stolen or used improperly by others. At the same time members need to defend their member-owner rights not to be denied in their cooperatives so that they maintain their capacity to help sustainability of their cooperatives. To conclude, member psychological ownership measured in member accountability, member self-efficacy, member self-identity, member sense of place/belongingness and member territoriality has a significant positive relationship with sustainability of urban primary consumer cooperatives societies operating in Ethiopia.

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6. IMPLICATIONS OF THE STUDY

Findings of this research have many practical implications for urban primary consumer cooperatives members, management, employees and the Ethiopian cooperatives commission (ECC) helpful in sustainability of urban primary consumer cooperatives operating in Ethiopia.

In Ethiopia many studies have been carried out on cooperative societies and their members. To mention a few Kodama [61] studied on economic importance of cooperatives, Meniga [62] studied about challenges and growth of cooperatives and Woldie [63] researched about the cooperative movement in Ethiopia. None of them have attempted to link member psychological ownership and sustainability of urban primary consumer cooperatives. The current study attempts to fill this research gap. Member psychological ownership was evaluated using five dimensions [23]. Findings indicated all dimensions viz. member accountability, member self-efficacy, member self-identity, member sense of place/belongingness and member territoriality are positively significantly related to sustainability of urban primary consumer cooperatives.

Therefore, members, management and employees of cooperatives, and the Ethiopian cooperative commission need to promote active member engagement, particularly, in urban primary consumer cooperatives since their incorporation. Always they need to remember that cooperatives are people centered organizations and their survival and resilience depend highly on their members active involvement in the cooperative process [10]. Members are everything to their Consumer cooperatives. They are its owners, employees, suppliers and customers [64]. Thus, investing in member education will pay off through enhancement of member psychological ownership and ultimately ensuring sustainability of urban primary consumer cooperative societies. Sustainability of cooperatives in general and consumer cooperatives in particular is hinged on their fundamental principles. Principles of voluntary and open membership, democratic member control, member economic participation and, autonomy and independence establish their cooperative identity while member education and training principle is aimed at promoting effective member participation which is the precondition for exercising member democratic control, the sixth principle. The seventh principle of cooperation among cooperatives is vital to encourage members for cooperation with other cooperatives without which they are prone to remain economically vulnerable; ultimately testing their resilience and sustainability.

7. LIMITATIONS OF THE STUDY

There are some limitations to the current study that should be discussed here. One limitation of the study is that data was collected from members of urban primary consumer cooperatives only. Hence, generalizing study findings to other types of cooperative societies was not possible. Thus, future researchers can conduct the same study on other types of cooperatives. In addition, management and employees were not included in the study. This research opens doors for future studies to explore the influence of psychological ownership on cooperatives. Potential areas of expansion include

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investigating different cooperative types, the experiences of employees, and the perspectives of cooperative management.

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