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Matthias Buser<sup>1</sup> · Torsten Schlesinger<sup>2</sup> · Siegfried Nagel<sup>1</sup>

<sup>1</sup>Institute of Sport Science, University of Bern, Bern, Switzerland

<sup>2</sup>Institute of Human Movement Science and Health, Chemnitz University of Technology, Chemnitz, Germany

# Which context matters? Analysing team and club contextual conditions of member commitment in voluntary sports clubs

## Introduction

Voluntary sports clubs (VSC) are often associated with social benefits, such as health promotion, democratic participation and social integration (European Commission, 2007; Nagel, Elmoose-Østerlund, Ibsen, & Scheerder, 2020). However, not only since the shutdown of club activities during the coronavirus disease 2019 (COVID-19) pandemic, VSC have faced increased competition from other sports providers and the erosion of traditional norms of solidarity that have weakened stable, long-term memberships (Burrmann, Sielschott, & Braun, 2022; Lamprecht, Bürgi, Gebert, & Stamm, 2017; Löbig, Ehnold, & Schlesinger, 2020; Nagel et al., 2020). Such tendencies put the VSC social benefits at risk, as they often connect to stable and long-term membership. For example, social integration increases with membership duration and volunteer activity (Elmoose-Østerlund et al., 2019). The same is true for democratic participation and club engagement (Ibsen et al., 2019). Unstable memberships might threaten sports programs as the most important club goal (Kuijsters-Timmers, Goedee, & Leenders, 2021; Löbig et al., 2020; Schlesinger & Nagel, 2013). This issue may be particularly significant in football, where a minimum

number of team members is required to play and compete (Nagel & Vogel, 2012).

Based on the concepts of social action (Coleman, 1994; Esser, 1999), Nagel (2007) has argued that individual actions in VSC, such as member commitment, depend on the individual characteristics of members, as well as on conditions in the social environment of the club. Various studies on individual actions, such as member commitment, social integration and sports club volunteering, have considered club contextual conditions using empirical multilevel models (Buser, Zwahlen, Schlesinger, & Nagel, 2021; Schlesinger & Nagel, 2015; Elmoose-Østerlund et al., 2019; Ibsen et al., 2019). However, these studies often showed only moderate differences in individual outcomes between clubs and thus questioned the contextual relevance of the club.

One reason could be that club contextual conditions are highly aggregated, whereas less-aggregated social circumstances are more influential on individual actions. In team sports, members spend most of their time on teams where they regularly meet and interact with others. Although several studies on sports club participation and dropout have highlighted the relevance of social conditions in teams (Carron, Widmeyer, & Brawley, 1988; Jenkin, Eime, van Uffelen, & Westerbeek, 2021; Molinero, Salguero, Álvarez, & Márquez, 2009), empirical

analysis of member commitment has not considered the team level as a separate level of analysis.

This study aims to introduce team level to multilevel research on VSC member commitment and to differentiate between team and club contexts when analysing the social environment of individual action in sports clubs. With the control of individual-level member characteristics, this study builds an innovative three-level model that enables the simultaneous analysis of club and team contextual conditions. It addresses the following research question: *What is the role of the club and the team context in VSC member commitment under control of individual member characteristics?* The social environment was analysed in two steps, using data from an empirical study of 42 Swiss football clubs and 138 football teams. First, analysis of the intraclass correlation coefficients (ICC) allows a comparison of contextual influences at both the team and club levels (Hox, 2010; Schlesinger, Klenk, & Nagel, 2017). Second, a multilevel analysis of the structural conditions as indicators of the social environment at both levels was conducted. Structural conditions, assumed to be relevant and measured identically at both levels, were included in an explorative manner (team/club goals and culture). This enables the differentiation of struc-

tural effects between the club and team levels.

## Theoretical background and literature review

Member commitment is defined as a member's formal decision to stay in a club and not complete formal club membership (Burrmann et al., 2022; Nagel, 2007; Schlesinger & Nagel, 2015). In this way, it is connected to sports club participation in the case of the decision to stay in the club or dropout in the case of the completed action of leaving a sports setting. Member commitment is also linked to member retention as an effort by the VSC to prevent dropouts. It is important to note that member commitment can also be defined informally. Therefore, member commitment is not only linked to continued participation but also to socio-emotional involvement or club-political engagement (e.g. Kuijsters-Timmers et al., 2021). However, our study follows recent actor-theoretical sports club research using the formal definition of member commitment (e.g. Schlesinger & Nagel, 2015). Unless otherwise stated, member commitment refers to formal membership.

In 2015, two of ten European sports clubs reported (very) large problems with member recruitment and retention (Seippel et al., 2020). In three out of ten clubs, this problem was perceived more strongly in Switzerland, where this study was conducted (Breuer, Feiler, Llopis-Goig, & Elmoose-Østerlund, 2017). Forty-five per cent of the Swiss VSC desired support in recruiting and retaining their members (Lamprecht, Bürgi, & Stamm, 2020). This problem has also been observed at the individual level. Data on member commitment in the Swiss VSC show that approximately one-third of members considered leaving the club (Schlesinger & Nagel, 2013). However, a closer look at recent findings from various sports club reports reveals that not all clubs suffer from these problems equally. Some clubs have only a few problems with member fluctuations, whereas others show a considerable decline (Lamprecht et al., 2020). Thus, it can be assumed that members' commitment may also depend on the

contextual conditions within each sports club.

## Contextual conditions of member commitment

Several conditions related to the social environment of the members can be linked to stable membership. Sports club reports highlight the role of the situational and formal structures of the clubs (Bürgi, Lamprecht, Gebert, & Stamm, 2018; Koenigstorfer & Wemmer, 2019; Lamprecht et al., 2017; Rullang, Emrich, Pierdzioch, & Gassmann, 2016; Seippel et al., 2020; Wicker & Breuer, 2010, 2013). For example, problems of member recruitment and retention are perceived less frequently in larger clubs and smaller municipalities. They also decrease with club strategic policies, the use of public facilities or the quality of club services. In addition, sports club reports also point to the relevance of cultural conditions: problems of member recruitment and retention are perceived less in clubs with a culture of conviviality and trusting relations between members and club representatives (Koenigstorfer & Wemmer, 2019; Seippel et al., 2020; Wicker & Breuer, 2013).

However, club reports rely on the responses of club officials, whose perceptions can differ from those of members (Rullang et al., 2016). Therefore, several studies have analysed stable membership as an individual member decision (Burrmann et al., 2022; Jakobsson, Lundvall, Redelius, & Engström, 2012; Kuijsters-Timmers et al., 2021; Löbig et al., 2020). These decisions depend on the conditions inside and outside the club.

Club-related conditions have often been analysed at the individual level. Members think less about leaving the club when they are satisfied with club services or show an orientation towards solidarity (i.e. the feeling and perception of solidarity among club members) and identification with the club (Nagel, 2006, 2007; Nagel & Schreiner, 2007). An orientation towards solidarity has recently been confirmed to stabilise member commitment during times of COVID-19 (Burrmann et al., 2022).

Although measures of orientation towards solidarity and identification include club cultural items (e.g. perception of the atmosphere in the club), multilevel models of member commitment in Swiss and German VSC have not considered these at the contextual level (Schlesinger & Nagel, 2013, 2015). However, studies indicate that club context plays a role in member behaviour, as suggested by the different extents of member exit thoughts across clubs. Some of these differences were explained by the club's sociability goals as stabilising factors of member commitment, as well as the goals of sporting success and municipality size as destabilising factors.

Multilevel models of member behaviours from other studies have often found only moderate differences between clubs (Buser et al., 2021; Elmoose-Østerlund et al., 2019; Ibsen et al., 2019). However, other contexts have rarely been considered. Country contexts were found to explain only small differences in club problems of member retention (Seippel et al., 2020) and the social integration of members (Elmoose-Østerlund et al., 2019). The same holds true for district differences in sport club participation (Hallmann, Feiler, & Breuer, 2015). Overall, the empirical findings at the club level indicate low variance. This may reflect methodological problems, as the contextual conditions of the clubs may be overly aggregated; therefore, less-aggregated contextual features may be more relevant to member action.

Team context has not been considered a separate context in sports club research, although its relevance has been acknowledged in different studies (Buser et al., 2021; Elmoose-Østerlund et al., 2019; Nagel & Vogel, 2012; Schlesinger & Nagel, 2015). The importance of team context also becomes evident in reviews on dropouts from organised football, which point to the role of interpersonal and social conditions relevant to teams (Schlesinger, Löbig, Ehnold, & Nagel, 2018; Temple & Crane, 2016). Here, positive social relationships with teammates and coaches and a suitable team atmosphere were highlighted to prevent dropouts (e.g. Carron et al., 1988; Molinero et al., 2009).

We conclude from the existing literature that stable formal membership should be conceptualised as an individual decision of the member and, based on differences in stable membership between clubs, linked to contextual conditions in the club. The connections between structural conditions and individual actions can be conceptualised based on action theory (Esser, 1999), which is frequently applied in research on member actions in sports clubs (originally Nagel, 2007). It assumes that individual actions are guided by expectations and norms that are anchored in structural conditions (Schimank, 2016). In our case, structural conditions might refer to the strategies, goals and cultural norms of the club that are relevant to the decision of stable membership. Following the literature discussed above, we focus on the goals of sports clubs and club cultures.

At the grassroots amateur level, sports club participation and stable membership might be especially motivated by social cohesion and a sense of community, while sports success is of lower importance (Jenkin et al., 2021; Lamprecht et al., 2017; Lamprecht et al., 2020). Therefore, we assume that (1) sociability goals help members satisfy their motives and stabilise their commitment (Schlesinger & Nagel, 2015). At the same time, (2) success goals might complicate satisfaction and destabilise member commitment (Schlesinger & Nagel, 2013).

However, divergence of members' interests with club goals does not necessarily result in dropout, and members might also use their 'voice' option to bring about change instead of the 'exit' option (see Hirschman, 1970). For example, someone unhappy with high success goals can advocate for more social goals. The choice between 'voice' and 'exit' is likely to be influenced by club culture. Club culture can be understood as members' commonly shared norms and beliefs (Nagel, 2006). Sports club culture has often been discussed in two different strands of sports club research. (1) Following research on member commitment, members decision to use 'voice' or 'exit' depends on the club's norms

of solidarity and togetherness (Baur & Braun, 2003; Nagel, 2006; Schlesinger & Nagel, 2015). Norms of solidarity and togetherness are connected to the socio-emotional identification of members with the club and their fellow members. Therefore, members choose to use their 'voice' in the case of conflicts of interest instead of finishing their membership. Thus, we assume that a culture of togetherness is relevant to stable membership. (2) However, solidarity-based sports clubs may also show tendencies towards social closure (Baur, Burrmann, & Nagel, 2003a, b), complicating the long-term membership of members who are not able or willing to identify with the central cultural norms and beliefs in the club (Seiberth & Thiel, 2007). Research on diversity in sport clubs has often highlighted the importance of pluralistic club culture (Burrmann, Brandmann, Mutz, & Zender, 2017; Elling, de Knop, & Knoppers, 2001). For example, it has been shown that norms of mutual respect contribute to feelings of belonging to different social groups. Such arguments may be particularly important for the members of different minority groups. However, it can also be assumed that the cultural norms of respect and acceptance are central to members in general.

### Conceptualising the three-level model

Several social theorists have called for the inclusion of an environment in which a person is socially embedded to explain social actions (Barton, 1968; Coleman, 1994; Esser, 1999). However, not all social contexts are relevant; they 'only have an effect to the extent that they are able to systematically influence people's expectations and evaluations' (Esser, 1999, p. 433, own translation). Contextual effects become relevant if the context exists in a sufficiently delimited form with clear boundaries and affiliations and if the context is relatively close to the immediate personal environment (Esser, 1999).

Therefore, an exclusively individual view of member action in a VSC is insufficient. This leads to the establishment of a heuristic multilevel model of member commitment (Nagel, 2006, 2007). This

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M. Buser · T. Schlesinger · S. Nagel

## Which context matters? Analysing team and club contextual conditions of member commitment in voluntary sports clubs

### Abstract

Voluntary sports clubs (VSC) face the challenges of dropouts and unstable membership. Studies have analysed member commitment—that is, the decision to remain in a club—regarding individual member characteristics and structural club conditions. To date, studies have not considered the team context, even though most members participate in teams or training groups. To address this research gap, this study analysed the role of team and club contexts in VSC member commitment. This study applies an innovative three-level model to a sample of 1395 Swiss football club members selected from 138 teams across 42 clubs. This study highlights the relevance of the team context, where pronounced goals of sporting success are detrimental, and a culture of mutual respect benefits member commitment. Based on this study, the team context should be included in theoretical and empirical models of member action in sport clubs.

### Keywords

Nonprofit sport clubs · Member retention · Multilevel analysis · Team structures · Club structures

is underpinned by conceptualising VSC as interest communities, where members pool their individual resources (time and money) for the collective realisation of common interests and create a distinctive social context with club-specific conditions (e.g. social and sporting opportunities) that influence their individual behaviours (Emrich, 2005). The decision to stay or leave the club is then empirically analysed both because of individual characteristics (e.g. age, membership duration, member satisfaction) and the club's structural conditions (e.g. club goals/culture).

However, because VSC often realise their common goals of sports activities in teams and that this is where members

spend most of their club time, it is necessary to consider the social context of the team to correctly describe the members' social environment. A team can be described as a defined social group of members who meet regularly and is, according to Esser (1999), a relatively stable social context within the club with clear boundaries and affiliations. Similar insights follow the conceptualisation of the team as a social group according to Neidhardt (1983) and Tyrell (1983), where social groups are characterised by close personal relationships, interaction constellations, feelings of emotional and social belonging and the development of specific structures and norms (e.g. team goals and culture). Thus, teams develop contextual conditions that may differ from those of the club and other teams and are also due to the relevance of personal relationships close to the immediate personal environment of the members.

Although we assume that the team context is of particular relevance, it is important to note that the team and club contexts overlap because members are part of a team and club at the same time. The development of team goals and culture relies on the contextual conditions of the club, as well as the individual characteristics of the members. Club conditions set the situational logic for teams, but clubs or team officials may implement corresponding team goals to various extents. For example, success may be less important in youth teams, or sociability goals may be more relevant to teams at lower levels. Cultural norms, understood as commonly shared norms and beliefs of members (Nagel, 2006), can differ between club teams, as teams gather different individuals with specific orientations. This may be particularly relevant if the teams remain together for longer periods. Therefore, it can be assumed that contextual conditions differ between the teams of a club and the club itself, and attention must be paid to the reinforcing and compensating effects at both levels. Therefore, we relied on a heuristic multilevel model that considers the social conditions of individual member commitment at both the club and team level. As argued previously, we consider

goals (sociability and sporting success) and culture (togetherness and respect) to be relevant factors for formal membership in our empirical analysis.

## Methods

### Sample

To analyse the role of contextual conditions in VSC member commitment, we used data from a cross-sectional study (anonymised) conducted in 2019 with the support of the Swiss Football Federation (SFV) with 1395 football club members from 138 teams belonging to 42 football clubs.<sup>1</sup> In Swiss football, participation, recruitment and retention are perceived as having fewer problems. However, perceptions of retention problems also differ among football clubs, and one-third of football clubs are confronted with medium-to-significant problems (Bürgi et al., 2018).

Football clubs were selected based on selection criteria (e.g. language region, settlement structure, club size and club goals) related to a pre-questionnaire answered by 119 clubs. To achieve appropriate variance in structural conditions and allow the testing of connections with member commitment, the central purpose of the selection process was to include a broad range of clubs with different structural conditions rather than having a representative sample of Swiss football clubs. For example, clubs were selected across different settlement structures (rural, agglomerated and city) and club sizes (45 members up to 1000). Data were collected at club, team and individual levels. Club officials answered an online questionnaire (in German or French) regarding the structural conditions of the clubs. Trained multilingual interviewers visited two to five teams of players aged at least

15 years in each club. The coaches answered a paper-and-pencil questionnaire (in German or French) regarding the team conditions. Team members completed a paper-and-pencil questionnaire (in German, French, or English) on their individual characteristics and commitment. The surveyed members belonged to teams of 42 youths and 96 adults. They all competed at the (inter-)regional amateur level, with 2.14 practices per week on average. The members were, on average, 24.7 (standard deviation [SD] = 9.3) years old; 187 (13.4%) were women, and 215 (15.4%) were born outside Switzerland. Those surveyed had been members of the club for 8.7 (SD = 7.7) years on average, and 229 (16.4%) held a voluntary position.

## Operationalisation/Measures

Following Nagel (2006) and Schlesinger and Nagel (2013, 2015), member commitment was operationalised as the decision to stay or leave the club as indicated by members' exit thoughts. Members were asked whether they had recently considered leaving the club, with three answer options ('no', 'yes, sometimes', 'yes, often') to measure exit thoughts. Although not every member who considers leaving the club will actually do so, the probability of exit may be significantly higher among members who have already considered such a decision. Nagel and Vogel (2012) showed that dropouts are very similar to members who only think of leaving concerning involvement and satisfaction with (terminated) club membership.

Informal member commitment in terms of socio-emotional involvement and club-political engagement was included as an explanatory condition for exit toughness at the individual level. It was operationalised based on systematically developed measurement instruments for the multidimensional concept of social integration in VSC (Adler Zwahlen, Nagel, & Schlesinger, 2018; Elmoose-Østerlund et al., 2019). After conducting an exploratory factor analysis using the principal component method (Tabachnick & Fidell, 2019), the dimensions 'interaction' (e.g. being

<sup>1</sup> Originally, 1681 members were surveyed, which was reduced to 1525 members after data cleaning (see Curran, 2016). To reduce a loss of data due to listwise deletion, missing data points of metric-individual level variables (e.g. 2.1% of data points in items on identification) were imputed by cluster using expectation maximisation algorithm (Graham, 2009; Snijders, & Bosker, 2012). The remaining incomplete variables at individual and team levels led to the final sample of 1395 members.



**Table 1** Operationalisation and descriptive statistics of the independent variables

Independent variables	Operationalisation	Frequency/ mean (SD)
<i>Individual level</i>		
Age	Number of years	24.7 (9.3)
Women	Dummy, 1 = woman	13.4%
Born abroad	Dummy, 1 = born abroad	15.4%
Membership duration	Number of years in the club	8.7 (7.8)
Volunteering	Dummy, 1 = voluntary engagement	16.4%
Identification	Scale of 4 items (1–5) <sup>1</sup>	4.18 (0.69)
Interaction	Scale of 3 items (1–5) <sup>2</sup>	4.42 (0.57)
Placement	Scale of 5 items (1–5) <sup>3</sup>	3.17 (0.91)
<i>Team level</i>		
Youth team	Dummy, 1 = youth team	29.5%
Team goal sporting success	'Achieving sporting success' (importance for the team 1–5)	3.97 (0.87)
Team goal sociability	'Promotion of sociability' (importance for the team 1–5)	4.32 (0.76)
Team culture respect	Scale of 2 items <sup>4</sup>	4.71 (0.52)
Team culture togetherness	Scale of 3 items <sup>5</sup>	4.52 (0.55)
<i>Club level</i>		
Settlement structure	Rural	32.0%
	Agglomeration	30.0%
	City (reference group)	38.1%
Club goal sporting success	'Achieving sporting success' (importance for the club 1–5)	3.75 (0.66)
Club goal sociability	'Promotion of sociability in the club' (importance for the club 1–5)	4.57 (0.62)
Club culture respect	Scale of 2 items <sup>6</sup>	4.73 (0.39)
Club culture togetherness	Scale of 3 items <sup>7</sup>	4.44 (0.52)

*SD* standard deviation

<sup>1</sup> 'I am proud to belong to the club'; 'I feel closely connected to my club'; 'I like wearing our club's clothing'; 'Our club is the most important place where I do sports' (agreement 1–5; Cronbach's  $\alpha$ : 0.71)

<sup>2</sup> 'Other members respect me the way I am'; 'I find it easy to make social contacts'; 'I have made new friends through participation in the club' (agreement 1–5; Cronbach's  $\alpha$ : 0.57)

<sup>3</sup> 'I am usually present when a vote is taken by the general assembly'; 'I get actively involved in the club work contributing my own ideas'; 'I am interested in what our club management is planning and doing'; 'I discuss club affairs with other members'; 'I can imagine taking up an official position within the club' (agreement 1–5; Cronbach's  $\alpha$ : 0.74)

<sup>4</sup> 'In our team, we attach great importance to respectful interaction between members'; 'In our team, members are accepted as they are' (agreement 1–5; Cronbach's  $\alpha$ : 0.58)

<sup>5</sup> 'In our team, the feeling of togetherness among the members is strong'; 'In our team, there is a good atmosphere'; 'In our team, we attach great importance to team spirit and cooperation' (agreement 1–5; Cronbach's  $\alpha$ : 0.75)

<sup>6</sup> 'In our club, we attach great importance to respectful interaction between members'; 'In our club, members are accepted as they are' (agreement 1–5; Cronbach's  $\alpha$ : 0.61)

<sup>7</sup> 'In our club, there is a good atmosphere in the teams'; 'In our club, we attach great importance to team spirit and cooperation in partnership'; 'In our club, the feeling of togetherness among the members is strong' (agreement 1–5; Cronbach's  $\alpha$ : 0.74)

part of a social network in the club), 'identification' (e.g. feelings of belonging in the club) and 'placement' (e.g. being engaged in the club community work) were included at the individual level. Furthermore, typical membership-related variables (volunteering and

membership duration) and socio-demographic variables (age, gender and place of birth) were considered.

Contextual variables relating to goals and culture were operationalised at both club and team levels, according to previous studies on member actions in

VSC (Elmose-Østerlund et al., 2019; Schlesinger & Nagel, 2013). Contextual goals were measured using one item each for sociability and sporting success on a Likert scale ranging from 'not important' to 'very important'. Cultural conditions were also measured on a five-item Likert scale, according to Adler Zwahlen, Zahnd, Nagel and Schlesinger (2017). Three items were connected to the norms of solidarity (team spirit, atmosphere and togetherness) and combined into a factor called social togetherness. Two items are related to the norms of mutual appreciation and respect (acceptance and respect). This factor is called a respectful culture. Two control variables are included. The municipal structure was added at the club level to control for differences in member commitment and retention between clubs in cities, agglomerations and rural areas (Bürgi et al., 2018; Schlesinger & Nagel, 2015). A dummy for youth teams was added at the team level as problems of stable membership are especially described for youths (Schlesinger et al., 2018; SFV, 2022). **Table 1** presents the descriptive statistics and operationalisation of the independent variables.

## Data analysis

Multilevel models allow consideration of the nested structure of the data (members nested in teams and clubs) and, therefore, the assumed similarity of members sharing the same social environment. They also allow variables to be analysed at different levels simultaneously, and club and team contextual conditions and individual characteristics can be analysed simultaneously (Hox, 2010; Schlesinger et al., 2017). Several previous studies on sports clubs have used multilevel analyses (e.g. Buser et al., 2021; Elmose-Østerlund et al., 2019; Ibsen et al., 2019).

Intraclass correlation coefficients (ICC) were analysed by estimating a random intercept-only model. The ICCs indicate the extent to which member commitment differs among clusters, teams at the team level, and clubs at the club level. Higher ICCs indicate greater differences between the clusters and point to a high relevance of

**Table 2** Intraclass correlation coefficients (ICCs) of the three different modes of included levels

	Club only (%)	Team only (%)	Club and team (%)
ICC Club	6.0	–	2.2
ICC Team	–	14.7	12.8
Variance individual level	94.0	85.3	85.0

the social environment, independent of the individual characteristics of the members (small ICC = 0.05, large ICC = 0.15; Hox, 2010). Our data structure allows for the separate calculation of the ICC at both contextual levels, ignoring potential differences in commitment between clusters at the excluded level. The data also allows for the simultaneous inclusion of both contextual levels. In this variant, the ICC at the team level indicates differences between teams, controlling for differences between clubs and vice versa.

Subsequently, independent variables at the three levels were tested. Contextual conditions at both levels were analysed step-by-step, together with individual factors (Hox, 2010), to build the final model. Significance conditions at both contextual levels were tested together in the final full model. Our sample size can be compared with those in methodological works (Hox, 2010; Snijders, 2005), and the sample sizes at each level allowed for estimating factors at each level (Snijders, 2005). As single predictors are interpreted when other variables are zero, and the main interest is in level 2 and 3 predictors, the variables are grand-mean centred (Enders & Tofighi, 2007). Only the intercepts were allowed to be random, and unstandardised coefficients were reported.

With only three possible outcomes in member commitment ('never', 'sometimes' and 'often'), cumulative multilevel regression models for categorical data (Hox, 2010) were implemented in R using cumulative link mixed models of the ordinal package and a logit link function. When we analysed exit thoughts, a positive coefficient indicated lower member commitment. The results were best interpreted using the natural exponential function of the estimator. This value is called the odds ratio, demonstrating the multiplicative change in the odds of being in the 'sometimes' category compared

to 'never' and 'often' compared to 'sometimes' when the predictor changes by one unit (Tabachnick & Fidell, 2019, pp. 461–465).

## Results

In our sample, 69.0% of the members did not contemplate leaving the club, 24.1% occasionally considered it and 7.0% frequently thought about leaving the club. In the estimation of random intercept-only models, the analysis of the ICCs showed a small ICC of 6.0% at the club level and a large ICC of 14.8% at the team level when both contexts were analysed separately (Table 2). However, when both levels were included simultaneously, the ICC at the club level decreased to 2.2%, whereas the ICC at the team level decreased slightly to 12.8%. This means that ignoring the differences in exit thoughts between clusters at one level by (intentionally) ignoring the level of analysis is connected to an upward bias in the ICC. Ignoring the team level leads to an overestimation of the differences between clubs and the relevance (variance) at the individual level. Ignoring the club level leaves the relevance at the individual level unchanged but adds the ignored differences at the club level to the team level (Table 2). Therefore, the estimation of the random intercept-only model indicates that the three-level model is appropriate.

Model M1 tested the individual variables (Table 3). Higher age and being male were associated with fewer thoughts of exit. Higher integration of the dimensions of identification and placement is also beneficial, whereas interaction is not. Interestingly, volunteering was not relevant, and longer membership was connected to more existing thoughts.

Models M2.1 and M2.2 show that club sociability goals are not related to exit thoughts, while a higher focus on sporting success at the club level is positively

related. Club cultural aspects were irrelevant. Furthermore, no systematic differences existed between clubs located in rural areas and those located in cities. However, in Model M2.1, exit thoughts seemed lower in agglomerations than in cities.

Models M3.1 and M3.2 show that similar to the club level, a team goal for sporting success is positively connected to exit thoughts, but sociability goals are not. In contrast to the club level, a respectful team culture is associated with fewer exit thoughts. A team culture of social togetherness is not relevant. As expected, members of youth teams showed more exit thoughts than adult team members.

Relevant contextual factors were tested in the full model, M4. While no differences in exit thoughts are visible between settlement structures, club and team goals of sporting success and a respectful team culture remain relevant under mutual control. Predicting exit thoughts from our full model using standardised measures to compare effect sizes, it appears that club and team goals of sporting success, as well as respectful team culture, are similar in effect size. While 31.5% (26.2% sometimes, 5.3% often) of the members considered leaving the club when a team respectful culture was one SD below average team culture, only 24.7% (20.9% sometimes, 3.8% often) did so when it was one SD above (club goals: 31.1% and 25.1%; team goals: 31.0% and 25.3%). Compared with the individual level, these effects are rather low: only 16.3% of the members who strongly identify with the club (one SD above the average identification) are predicted to think about exiting. However, this does not imply that context is irrelevant. Predicting exit thoughts in a suitable context (+1 SD team culture, -1 SD team goal, -1 SD club goal), only 19.8% of the members considered leaving the club. Figure 1 shows the standardised exit thoughts for respectful team culture and identification.

## Discussion

This study introduces the team level to the multilevel analysis of formal member

**Table 3** Main models for individual factors and club and team contextual variables

	M0	M1	M2.1	M2.2	M3.1	M3.2	M4
<i>Individual level</i>							
Membership duration	–	0.04 ***	0.04 ***	0.04 ***	0.04 ***	0.04 ***	0.04 ***
Volunteering	–	–0.14	–0.14	–0.12	–0.21	–0.21	–0.21
Women	–	0.36 +	0.34	0.37 +	0.63 **	0.58 **	0.56 **
Age	–	–0.05 ***	–0.05***	–0.05 ***	–0.02 *	–0.02 *	–0.02 +
Born abroad	–	0.13	0.14	0.15	0.08	0.08	0.09
Identification	–	–1.03 ***	–1.04 ***	–1.02 ***	–1.02 ***	–0.98 ***	–1.01 ***
Interaction	–	0.11	0.10	0.09	0.1	0.08	0.09
Placement	–	–0.18 *	–0.17 +	–0.20 *	–0.16 +	–0.16 +	–0.18 *
<i>Club level</i>							
Settlement structures							
– Rural	–	–	–0.03	–0.08	–	–	0.21
– Agglomeration	–	–	–0.32 +	–0.23	–	–	–0.25
– City (Ref.)	–	–	–	–	–	–	–
Club goal sociability	–	–	0.18	–	–	–	–
Club goal sporting success	–	–	0.24 *	–	–	–	0.22 *
Club culture respect	–	–	–	–0.38	–	–	–
Club culture togetherness	–	–	–	0.27	–	–	–
<i>Team level</i>							
Youth team	–	–	–	–	0.97 ***	0.91 ***	0.99 ***
Team goal sociability	–	–	–	–	0.07	–	–
Team goal sporting success	–	–	–	–	0.16 +	–	0.16 +
Team culture respect	–	–	–	–	–	–0.34 *	–0.32 **
Team culture togetherness	–	–	–	–	–	0.01	–
Intercept 1 2	0.88 ***	0.94 ***	0.94 ***	0.94 ***	0.94 ***	0.94 ***	0.94 ***
Intercept 2 3	2.82 ***	3.03 ***	3.03 ***	3.03 ***	3.05 ***	3.05 ***	3.06 ***
Log likelihood	–1071.5	–985.72	–981.69	–983.83	–970.11	–968.54	–962.71
Akaike information criterion	2151	1995.44	1995.38	1999.66	1970.22	1967.08	1961.42
Bayesian information criterion	2171.96	2058.33	2079.23	2083.51	2048.83	2045.69	2055.75
Number of observations	1395	1395	1395	1395	1395	1395	1395
Groups (team: club)	138	138	138	138	138	138	138
Groups (club)	42	42	42	42	42	42	42
Variance: team: club: (Intercept)	0.50	0.20	0.18	0.19	0.12	0.11	0.07
Variance: club: (Intercept)	0.08	0.01	0.00	0.00	0.00	0.00	0.00

\*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ ; +  $p < 0.1$ ; A minus-sign (plus–sign) indicates higher (lower) member commitment

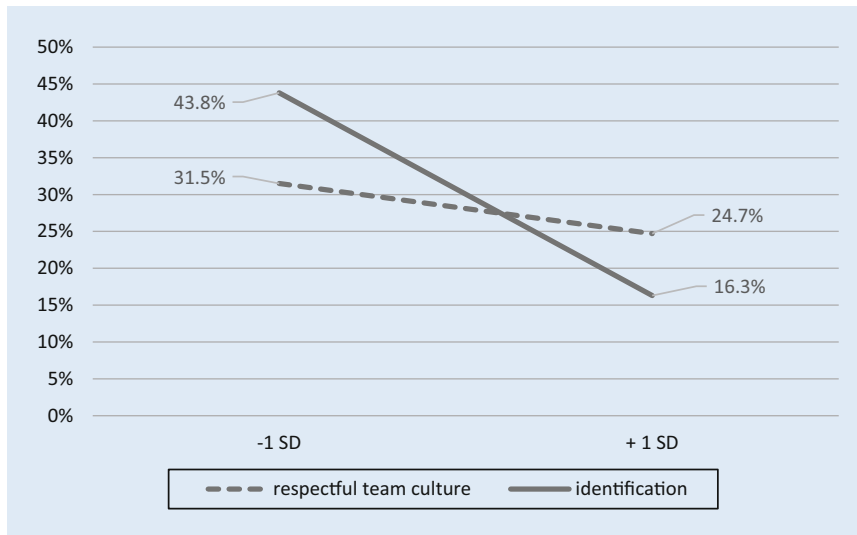
commitment, that is, the decision to stay and not think about leaving the club. This builds an innovative three-level model at the individual, team and club levels and enables a differentiated study of the contextual conditions of member action in a VSC. We investigated the role of club and team contexts under the control of individual characteristics of member commitment. We compared the contextual levels of clubs and teams with (1) the contextual influences indicated by the ICC, that is, the extent to which member commitment differs between clubs and teams, and (2) contextual goals and culture ex-

plaining differences in member commitment between clubs and teams.

The findings point to the contextual relevance of the team level when analysing member commitment and challenge the previous focus on the VSC (club level) as the primary unit of analysis in sports club research (e.g. Schlesinger, & Nagel, 2015; Elmose-Østerlund et al., 2019). The relevance of the team follows the theoretical considerations of close personal relationships in social groups (Neidhardt, 1983), which brings the team closer to the personal sphere of members, where contextual conditions

most likely influence individual actions (Esser, 1999). Empirically, this is shown in (1) a higher ICC at the team level; that is, greater similarity in member exit thoughts in teams than in clubs, or, in other words, greater differences in mean exit thoughts between teams than between clubs. It is also shown (2) in the relevance of cultural conditions, which are only applied at the team level, while sporting goals matter at both the team and club levels.

We conclude that clubs and teams are structural contexts that affect member commitment. Therefore, a contextual



**Fig. 1** ▲ Predicted exit thoughts based on the team level variable 'respectful team culture' and the individual-level variable 'identification', ranging from one standard deviation (SD) below to one SD above the average 'respectful team culture' and 'identification'

analysis of individual member actions must consider the team context and the club context to appropriately model the social environment of members participating in teams or sports groups. This may hold particularly for VSC but could also be relevant for other organisations (e.g. companies and other voluntary organisations) where members are organised in teams (Kühl, 2021).

Regarding (1) the analysis of the ICC, it needs to be noted that differences in exit thoughts between football clubs appear to be considerably smaller than between sports clubs in general (6.0% compared to almost 15% in Schlesinger & Nagel, 2013, 2015). One reason might be that football clubs are more homogeneous in their contextual conditions and, therefore, provide similar social environments. However, lower contextual relevance may also result from team sports, in which members interact with their team. Including the team level in our analysis, the ICC at the club level decreases considerably. This suggests that differences between clubs are overestimated in models without team level, and the question arises as to the extent to which similar changes are observable in studies on sports clubs in general (e.g. El-mose-Østerlund et al., 2019; Schlesinger & Nagel, 2015).

Although the team level can be seen as the primary unit of analysis, (2) rel-

evant contextual conditions were found at both levels. In line with previous findings (Schlesinger & Nagel, 2013), members think less often about leaving clubs that place less weight on success. The same effect, which has not been previously shown, holds for teams. As both effects are simultaneously relevant, it seems that sports goals at the team level reinforce adverse effects at the club level. However, it is important to note that the focus of this study was football at the grassroots level and that the role of sporting success might differ at a more competitive level. Surprisingly, sociability goals were not beneficial for member commitment at either the club or team level. This contradicts previous findings (Schlesinger & Nagel, 2013, 2015; Wicker & Breuer, 2013). Sociability goals may not be sufficiently translated into practice in football clubs or teams. However, compared to sport clubs in general (Buser et al., 2021; Schlesinger & Nagel, 2015), football clubs could also be quite homogeneous in sociability goals. Therefore, sociability goals might be relevant despite missing inferential effects.

Cultural conditions are relevant at the contextual level. This is new to multilevel research on member commitment but in line with research on member dropout (Schlesinger et al., 2018; Temple & Crane, 2016). This confirms the assumption that a suitable contextual culture stabilises

membership (Nagel, 2006; Rullang et al., 2016). It can be assumed that an appropriate culture will help members feel they fit in and use their voices instead of thinking about leaving in cases of disagreements (Hirschman, 1970). In our data, members of teams with a pronounced respectfulness culture were less likely to think about leaving the club, whereas the culture of social togetherness was not relevant. However, data suggest that social togetherness is closely related to respectful culture and identification at the individual level. The club level was not relevant to cultural aspects. This could be explained by the fact that members do not perceive informal subliminal cultural aspects at the superior club level in their everyday practices.

Practically, officials should negotiate sports success goals to avoid mismatches between members and teams/clubs that could be detrimental to member commitment. When goals mismatch, a culture of acceptance and respect among members can be central to avoiding exit thoughts. Therefore, it is important that officials and members celebrate diverse values and identities and do not strive for homogenous groups and climates (Elling et al., 2001).

Of course, many other factors are connected to member commitment aside from contextual goals and culture at the team and club levels. This certainly holds at the individual level, where most variations in member commitment are explained. Here, social integration in the identification dimension seems to be an important stabiliser of member commitment (Schlesinger & Nagel, 2015). Furthermore, women think more about leaving the club than men do, which could be explained by the precarious role of women in male-dominated football clubs. Long-term members often think about leaving the club. However, caution is needed regarding this effect because long-term membership is closely connected to social integration.

Furthermore, relevant conditions may exist at the structural level. Our analysis considered the situational and formal conditions of clubs and teams. However, at the club level, municipality size, club size and language (not reported) were



unrelated to commitment. At the team level, adult team members think less often about leaving the club. It can be assumed that the annually changing team composition in youth football is likely to destabilise member commitment because of the high relevance of social contact and friendship for stable membership (Schlesinger et al., 2018; Temple & Crane, 2016). Furthermore, many structural conditions that were not considered in our analysis (e.g. relationships with the coach/other members, sporting reputation and team success) may be relevant to member commitment.

Finally, although not the focus of this study, conditions external to the club also influence members' commitment. Lower commitment in youth teams may also be explained by changes in interest and responsibilities among younger age groups. For example, experiences in school and other leisure activities (Löbig et al., 2020) are related to stable membership.

## Limitations and future research

Multilevel analysis is a complex method with detailed requirements in survey design, data structure and analytical procedures. Several limitations and future research scopes are notable, in addition to the usual problems of cross-sectional studies and selection effects (see Buser et al., 2021).

First, the factor reliability was relatively low for the culture of respect and social integration factors in the interaction dimension. This also holds true for the Spearman–Brown coefficient, which is appropriate for the two-item factors (Eisinga, Grotenhuis, & Pelzer, 2013). Furthermore, the theoretical differentiation between a culture of social togetherness and a culture of acceptance was not confirmed by explorative factor analysis, which suggests a single-factor solution. Multilevel models calculated for this single cultural factor confirmed the significant relevance of cultural aspects at the team level, which remained irrelevant at the club level. Therefore, to improve the factor reliability and empirical differentiation of the two theoretical factors, additional items should be considered in future questionnaires.

Second, the contextual conditions were surveyed by the coach or president because of their substantial contextual knowledge. However, it may be useful to talk to members and aggregate individual answers at the contextual level, particularly regarding the cultural aspects of teams and clubs. Users should be aware of the differences between context and climate aggregates (Marsh et al., 2012). This procedure must ensure that the sampled members represent the context of interest.

Third, the sample only considers football clubs and teams that are likely to be more contextually homogeneous than clubs and teams from other sports. This might reduce the heterogeneity in contextual features and, therefore, the differences between clubs and teams. The selection of different sports organised into sports teams or groups may be of interest to future research and would allow the analysis of further contextual conditions (e.g. team size).

Fourth, multilevel analysis not only allows the analysis of factors at different levels but also tests for cross-level interactions. In previous two-level studies, cross-level effects were incorporated between factors at the club and individual levels (club  $\times$  individual, Buser et al., 2021; Schlesinger & Nagel, 2015). However, introducing the team as an additional level opens the possibility for further two-way interactions (club  $\times$  team, team  $\times$  individual) and even a three-way interaction (club  $\times$  team  $\times$  individual). When testing only conventional two-level cross-level effects (club  $\times$  individual, team  $\times$  individual), no relevant effects were found for the three central contextual conditions (sporting success, respectful culture) except for the interaction between the club's goals of sporting success and social integration within the dimension of interaction. People who interacted more successfully in the club were more likely to consider leaving the club with increasing success goals. However, future studies should conceptualise higher-order interaction effects (club  $\times$  team  $\times$  individual) and interactions between higher levels (club  $\times$  team), which are new to analysing

club member actions from a theoretical perspective.

Finally, this article introduces the team context by testing a few central conditions at the team and club levels. Several other conditions within and outside a sports club can also be linked to member commitment. For example, human resources (volunteers and coaches) may be relevant at both levels (Seippel et al., 2020; Wicker & Breuer, 2013). Furthermore, the social context and team friendships are relevant (Schlesinger et al., 2018; Temple & Crane, 2016). This may indicate an additional social context for team friendship groups (Steiger, Mumenthaler, & Nagel, 2021).

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## Corresponding address

### Matthias Buser

Institute of Sport Science, University of Bern  
Bern, Switzerland  
matthias.buser@unibe.ch

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## Declarations

**Conflict of interest.** M. Buser, T. Schlesinger and S. Nagel declare that they have no competing interests.

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