Family Climate and Social Adaptation of Adolescents in Community Samples: A Systematic Review

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Abstract
The family plays an important role in adolescents’ social development. Yet there is little information about the impact of family climate on adolescents’ social adaptation, and the term “family climate” is seldom clearly defined and is usually related to other concepts, such as family systems or family environments. To understand the core of family climate, this study conducted a systematic review to analyze research about family climate associated with adolescents’ social adaptation in community samples. A search of empirical research published over the last 20 years identified 12 relevant studies. The studies revealed that family climate can mainly be described in terms of cohesion, conflict, organization, adaptability, and expressiveness. Family climate was shown to be a good predictor of both problem-solving skills and violence in relationships and exhibited further associations with other aspects of social adaptation. This review revealed a need for more systematic and longitudinal research on family climate in community samples.

Keywords Family environment · Family system · Adolescents · Social adaptation · Systematic review

Introduction
One of the strongest predictors of adolescents’ positive social adaptation is growing up in a comfortable home with secure emotional bonding between family members (Vandevaler et al., 2007). Clinical research has shown that a positive family climate is a protective factor for adolescents’ social problems (Park & Schepp, 2015) and has an impact on their well-being (Brinkema et al., 2020). As Olson et al. (1983) emphasized, families in community samples should not only be examined as control groups for comparison with families in clinical settings, indicating the need to study family climate in community samples. In fact, family climate has now been studied in those samples. Family climate scales can represent the relationships of family members, which play an important role in the development and socialization of adolescents (Moos & Moos, 1976; Schneewind, 1991), but research on family climate and social adaptation of adolescents in community samples is still lacking. The limited research already indicates that it is often related to other concepts (such as family environment and family systems) that are mostly defined via measuring instruments. Although there are measurement instruments for family climate, they are seldom used (e.g., the Family Climate Inventory by Kurdek et al., 1995). Further, there are seldom any definitions of family climate provided. Thus, reviewing familial influences may inform holistic models of family climate in association with adolescents’ social adaptation. This systematic review provides an overview of studies examining the impact of family climate on social adaptation of adolescents in community samples in the past twenty years to give an empirically based definition of family climate and to highlight the potential of family climate in relation to adolescents’ social adaptation.

Family climate is mostly defined by measuring instruments that provide an approach to describe characteristic relationship styles (Schneewind, 1991). Three different but similar concepts (family climate, family environment, and family systems) are particularly known to describe various aspects of daily life of families with adolescents, which are often used to describe or measure family climate. These concepts are thus also bound to use different but similar measuring instruments that reflect the respective construct. The first concept related to family climate is family environment, which is described with a focus on the social climate
of families (Moos & Moos, 1976, 1983). The Family Environment Scale (FES) was developed by Moos and Moos (1976) to identify family types in relation to different family surroundings. It consists of 10 subdimensions, which are organized into three dimensions of family environment (FES dimensions): relationship, system maintenance/system change, and personal growth/goal orientation. Moos and Moos (1976) pointed out that each of the 10 subdimensions of FES represents one dimension of family climate. While there is no further explanation, the scale has already been translated into German and adapted to measure family climate (Schneewind, 1995).

The second construct related to family climate is family system. This includes all family members and their relationships with each other, their interests, independence (cohesion), roles within the family, and ability to change power structures (adaptability; Olson et al., 1979). To assess marital and family systems and their functioning, the Family Adaptation and Cohesion Evaluation Scale (FACES) was developed by Olson et al. (1979). This measurement consists of three dimensions: cohesion, adaptability, and communication. Members of families with balanced scores on the two main dimensions (cohesion and adaptability) exhibited superior communication skills compared to members of families with very high or very low scores on the two dimensions. Empirically, these two main dimensions of FACES exhibit low correlation (or are even orthogonal), which is summarized in the Circumplex Model (Olson, 1986).

The Family Climate Inventory (FCI) was developed by Kurdek et al. (1995) to describe aspects of families, such as emotional bonding, support, control, and the extent of conflictual interactions. The FCI is comprised of four dimensions: supervision, conflict, autonomy granting, and acceptance. However, this measurement was rarely used in studies. Screening all titles of the 349 studies on Google Scholar that cited Kurdek et al. (1995) revealed that two English studies used the term “family climate” in the title but did not use the FCI in the study (Kumar, 2016; Xia et al., 2016). This unsystematic insight is not very meaningful, so it needs to be examined in a systematic review. However, other measurement tools to assess family climate have been developed for other research areas, such as family business research (Family Climate Scale, Björnberg & Nicholson, 2007) or in languages other than English (e.g., the Inventário do Clima Familiar (ICF) in Spanish, Teodoro et al., 2009).

### Family Climate Concept: Theoretical Based Definition of Family Climate guided by FES, FACES, FCI

Similarities in the three concepts used to understand the core of family climate can be seen in an aggregation of all operationalizations of the three measurement instruments as they relate to the FES. The FES was chosen because it is a well-established measurement tool for assessing the family environment and contains more dimensions than the other instruments, thus enabling a broader and more complete overview of family climate. Moos and Moos (1976) defined all 10 dimensions of family environment as dimensions of family climate, which are divided into three interdependent main dimensions (relationship, system maintenance/system change, and personal growth/goal orientation). This is why they were chosen as a starting point for bringing the descriptions of the measurements together (Bloom, 1985). The allocation of all dimensions of the three measurements is shown in Table 1.

| Table 1 | Dimensions of family climate, family system, and family environment subsumed under the main dimensions of the family environment scale (Moos & Moos, 1976) |
| Main dimensions of FES | Relationship | System maintenance and system change | Personal growth and goal orientation |
|-------------------------|-------------|--------------------------------------|------------------------------------|
| Salient dimensions of FES | Cohesion expressiveness conflict | Organization control | Independence achievement orientation intellectual-cultural orientation active-recreational orientation moral-religious emphasis |
| Dimensions of FACES | Cohesion (communication) | Adaptability (communication) | |
| Dimensions of FCI | Acceptance conflict | Supervision | Autonomy granting |

Communication is bracketed because it facilitates itself through the other two dimensions

FES Family Environment Scale (Moos & Moos, 1976), FACES Family Cohesion and Adaptability Evaluation Scale (Olson, 1983), FCI Family Climate Inventory (Kurdek et al., 1995)
(Family Climate Inventory, Family Environment Scale, and Family Adaptability and Cohesion Scale), which are combined on a theoretical level structured by the FES dimensions (relationship, system maintenance/system change, and personal growth/goal orientation; Moos & Moos, 1976).

**Relationship Between Family Members**

The FES “relationship” dimension describes the emotional aspects of the family, such as the bonding between members, the way they express themselves, and the potential for conflict. Acceptance, cohesion, conflict, communication, expressiveness, and support could be assigned to the FES relationship dimension. The “cohesion” dimension of the FES is also included in the FACES (Olson et al., 1979), described by levels of affection, friendship, and intimacy shared in the family, and is defined as emotional bonding among family members (Olson & Gorall, 2006). The “acceptance” dimension of the FCI describes aspects such as support, communication, and parental responsiveness (e.g., “Someone in my family helps me when I need it”; Kurdek et al., 1995, p. 443). “Conflict” refers to the extent of conflictual interactions between family members and involves negative feelings (e.g., “People in my family criticize each other”; Kurdek et al., 1995, p. 443). The way family members express their feelings is measured by “expressiveness”, which describes the way family members verbalize their feelings. Verbalizing emotions among family members is also assessed by “communication”, which is the third dimension of FACES (e.g., “It is very easy for me to express all my true feelings to my mother/father”; Olson et al. 1985, p. 55). Communication covers “listening skills, speaking skills, self-disclosure, clarity, continuity tracking, and respect and regard” within the family (Olson et al., 2019, p. 202).

**Family System Maintenance/System Change**

The FES “system maintenance/system change” dimension can be described by structures, routines, and rules within the family, and the flexibility of the family to change these things. Organization, control, and adaptability can be assigned to this FES dimension. The way family members plan activities or organize daily life is measured by the “organization” dimension of the FES. “Supervision” describes the degree of parental control in the family (“Someone in my family keeps a close eye on me”; Kurdek et al., 1995, p. 443). The “control” dimension includes hierarchy, the rigidity of rules and procedures, and the way family members attempt to exert power over each other (“There are a few rules to follow in our family”; Moos & Moos, 1976, p. 3). The degree of flexibility within the family is assessed by the “adaptability” dimension (“We shift household responsibility from person to person”; Olson, 1983, p. 247) and focuses on how the family system balances stability with change (Olson et al., 2019). “Adaptability” refers to the family’s ability to change its daily structure, rules, and roles in the relationships between family members to respond spontaneously to situational or developmental needs (Olson & Gorall, 2006; Place et al., 2005).

**Personal Growth/Goal Orientation of the Family**

The FES “personal growth/goal orientation” dimension assesses the family’s individual system of values, norms, and familial attitudes. The familial goal orientation is measured on the basis of religious and cultural orientation as well as educational orientation and views on active recreation (the intellectual-cultural orientation: “We often talk about political and social problems”; Moos & Moos, 1976, p. 2). The individual sense of autonomy, support, and independence in the family environment is assessed by two instruments: the FCI (“Someone in my family encourages me to make my own decision”; Kurdek et al., 1995, p. 443) and the FES (“In our family, we are strongly encouraged to be independent”; Moos & Moos, 1976, p. 2).

**Family Climate and Its Role for Adolescents’ Social Adaptation**

Adolescents’ socialization processes and their ways of dealing with different social contexts are often explained with two different but similar concepts: social adjustment and social adaptation. Social adjustment means the ability to accommodate, associate, cooperate, compromise, and cope with oneself, others, and the environment (Samadi & Sohrabi, 2016). Social adaptation can be described with regard to interpersonal relationships, play and leisure, and coping skills (Racz et al., 2017). It describes behavioral tendencies with regard to socialization and education (LaFreniere & Dumas, 1996). Because the definition of social adaptation is broader than social adjustment, the term social adaptation is used in this paper. A strong connection between positive self-esteem and social adaptation has been demonstrated (Neely-Prado et al., 2019), which is why psychological aspects (such as self-esteem and emotions) and social aspects (such as bullying and violence) in different contexts, such as the family, school, and online environments, will be subsumed under social adaptation in the systematic review. Following prior research (O’Connor & Scott, 2007) and expecting that social competencies (such as emotion regulation) are learned in the family context and are carried forward to later social contexts (e.g., romantic relationships), family climate is examined as a predictor for adolescents’ social adaptation, even if other directions are conceivable.
Current Study

It has been shown that family climate is an important and complex construct with vague definitions and various operationalizations related to different measurements. For these reasons, measurements used to measure family climate in studies of the past twenty years should be examined in more detail. Research on the impact of family climate on adolescents’ social adaptation had different focuses but showed important outcomes for adolescents’ development. This is why a systematic review is needed for a systematic understanding of the concept of family climate and its potential for adolescents’ adaptation. Furthermore, research gaps could be identified that can drive future research. The following research questions were posed: Is there systematic research on family climate with regard to its theoretical definition (Research Question 1), how is family climate operationalized in the context of adolescents’ social adaptation in community samples, and how can family climate be defined based on all operationalizations (Research Question 2), and how does family climate influence adolescents’ social adaptation (Research Question 3)?

Methods

Selection Criteria

Studies about family climate and its impact on adolescents’ social adaptation published in the last two decades (2000–2020) were included. Only English studies were included in this search. An overview of the inclusion and exclusion criteria is presented in Table 2, and the systematic review process is illustrated in a flow chart (Fig. 1). The literature search was conducted using the following search strategy via popular databases (PsycINFO, Google Scholar): (“family climate”) and (“social adjustment” or “social adaptation”). The results were checked by the following search strategy: (“family climate”) not (“health” or “clinical”). Literature sources were reviewed by checking citations.

Both qualitative and quantitative studies were initially included. Since only one qualitative study was found (Phan, 2005), which did not contribute significantly to addressing the research questions, it was excluded, and only quantitative studies remained. The construct of family climate was assessed by a minimum of four items via two subdimensions, as fewer items would not do justice to its complexity and would not lead to a valid assessment of family climate.

Data Extraction

The description and measurement of family climate were checked by two raters regarding the exclusion and inclusion criteria (see Table 3). Rater 1 introduced Rater 2 to the inclusion and exclusion criteria, and both raters separately generated lists of studies that met all the inclusion criteria. The lists were consistent, and the final review included 12 studies. An overview of the literature used in the review is provided in Table 3, including the study design, samples, and associations between family climate and dependent variables related to social adaptation.

For the description of family climate, Rater 1 extracted all instruments for measuring family climate with examples and descriptions of family climate in the corpus (Table 4). All operationalizations of these measurements were used to form the definition. By combining all dimensions/subscales to measure family climate with the examples and descriptions used in the individual studies, the results provide a comprehensive definition of the family climate concept. To describe the impact of family climate on adolescents’ social adaptation, Rater 1 examined the associations between family climate and social adaptation variables in all studies. In longitudinal studies, only those effects describing a significant influence of family climate on social adaptation as a dependent variable were considered. In cross-sectional studies, only those associations that theoretically assumed an influence of family climate on

| Table 2 | Exclusion and inclusion criteria for the publications of this systematic review |
|---------|--------------------------------------------------------------------------------|
| Exclusion criteria | Inclusion criteria |
| All clinical studies investigating physical and mental illness patterns (e.g., depression, or neurodermatitis) | All nonclinical studies investigating family climate and adolescents’ social adaptation |
| Adults or young children only (≤9 years or ≥20 years) | Adolescents aged between 10 and 19 years (related to WHO definition; Sawyer et al., 2018) |
| “Family climate” is not assessed explicitly (related words like “family connectedness” or “family relationship” being used) | “Family climate” is assessed explicitly |
| “Family climate” is measured by less than four items | “Family climate” is measured by at least four items |
| In addition to family climate, no aspect of social adjustment/adaptation of adolescence is examined | In addition to family climate, at least one aspect of social adjustment/adaptation is examined |
social adaptation were included. Due to the different survey and evaluation methods and the heterogeneity of the variables included in adolescents’ social adaptation in the context of this work, a presentation of static characteristic values (e.g., effect sizes) was not considered meaningful. Therefore, the results were inductively combined into categories in terms of content to present the results. To minimize the risks of bias related to the completeness of the results with respect to the research questions, Rater 1 rechecked the extracted data from all 12 studies two months later. Finally, the quality of all studies was assessed by Rater 1 using the quality appraisal checklist for quantitative studies of the National Institute for Health and Care Excellence (NICE, 2012). The analysis showed different qualities in the studies. Most studies adequately met all requirement. For other studies, a more detailed description or a more critical approach to the sample would have been desirable. Although it is encouraging with regard to the topic of social adaptation that socially affected problems are not so common among adolescents.

Results

Family Climate Measurements

With regard to Research Question 1 (Is there systematic research on family climate with regard to its theoretical definition?), family climate was assessed with different measurements. Family climate is a widely used overarching term to describe daily family life, which is evident from a lack of definitions of family climate and the different measuring instruments used in the studies, as shown in Table 4. Regarding the operationalization, family climate was mainly measured by family cohesion (11/12 studies), which is a dimension of most measurements used to describe family climate (4/5 measurements). The similarity between family climate, family environment, and family systems becomes apparent through studies using the FES to measure family climate, which is explained through aspects of family functioning (family conflict,
cohesion, and organization) that reflect the general family climate (Fosco et al., 2016). None of the studies used all 10 dimensions of FES. None of the studies used the FCI, which is interesting, because it is the only measuring instrument that includes the term family climate. In addition, family climate was measured by the Family Climate Questionnaire Perceived by Children in Relation to Parents’ Management of Behavior Problems (CFPC-H, Cantero-García & Alonso-Tapia, 2017). The scale consists of four dimensions describing the four coping strategies practiced by parents (positive attitude, reasoning versus punishment, patience, and stress). Comparing the family climate dimensions from the literature review and the actually investigated dimensions in studies from the last twenty years showed that today family climate is mainly investigated at the level of relationships between family members, while in the past control within the family and independence of individual family members were also investigated. All the dimensions examined in the corpus of the systematic review are presented below, and based on this, an empirically based definition of family climate is given.

**Family Climate Model: Empirically Based Definition**

To answer Research Question 2 (How is family climate operationalized in the context of adolescents’ social adaptation...
in community samples, and how can family climate be defined based on all operationalizations?), all dimensions of the measurements in the reviewed studies were combined in one family climate model (see Fig. 2) according to the FES (Moos & Moos, 1983). The family climate model is based on the finding that family communication is a third dimension alongside the other two dimensions (cohesion and adaptability; Olson, 1986). For a better understanding of the dimensions, all item examples of the corpus are listed in Table 5. In general, family climate can be described with respect to emotional connections, conflicts, and support between family members. Further descriptions cover daily family attitudes and structures, such as orderly versus chaotic, hierarchical versus heterarchical, flexible versus static, or open versus closed.
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The family climate main dimension “relationship” was most commonly used in the corpus. It describes the quality of familial relationships and is measured by cohesion, conflict, and support within the family. Accordingly, dimensions regarding familial relationships form the core of family climate. Cohesion is one of the most frequently used dimensions and is included in most family climate scales (FES, FFS, FACES, and ICF), described as the emotional bonding between family members (Sbicigo & Dell’Aglio 2012). Feelings within the family are compared with feelings toward people outside the family (Idan & Margalit, 2014). The dimension “cohesion” also includes support (Fosco et al., 2016), which in other measurements is assessed separately. Family “support” encompasses the material and emotional support between family members, which is perceived when coping with individual or family problems (Sbicigo & Dell’Aglio 2012). “Conflict” involves negative feelings (Buelga et al., 2017) and includes criticism, anger, fights, and violence between family members (Xia et al., 2016). Family conflicts are inversely related to family support and cohesion (Sbicigo & Dell’Aglio 2012; Teodoro et al., 2009).

The family climate main dimension “system maintenance/system change” is described with regard to structures, rules, and flexibility among all family members and includes the dimensions of hierarchy, control, organization, and adaptability within the family. The distribution of power and control is subsumed under the hierarchy dimension.

Table 5 Dimensions of family climate with item examples based on the systematic review

| Dimensions            | Item example                                                                 | Main dimension                                      |
|-----------------------|------------------------------------------------------------------------------|-----------------------------------------------------|
| Cohesion              | “Family members feel closer to other family members than to people outside the family.” (Idan & Margalit, 2014, p. 141) | Relationship                                        |
| Conflict              | “People criticize each other often.” (Sbicigo & Dell’Aglio 2012, p. 617)    |                                                     |
|                       | “We fight a lot in our family.” (Xia et al., 2016, p. 445)                   |                                                     |
| Support               | “Family members really help and support each other.” (Fosco et al., 2016, p. 1143) |                                                     |
|                       | “We try to help family members when we realize they have problems.” (Sbicigo & Dell’Aglio 2012, p. 617) |                                                     |
| Organization          | “Activities in our family are pretty carefully planned.” (Fosco et al., 2016, p. 1143) | System maintenance and system change               |
|                       | “We are generally neat and orderly.” (Xia et al., 2016, p. 445)              |                                                     |
| Hierarchy             | “Some people solve problems in an authoritarian manner.” (Sbicigo & Dell’Aglio 2012, p. 617) |                                                     |
| Control               | Item example couldn’t be clearly assigned to this dimension. (Cerezo et al., 2018) |                                                     |
| Adaptability          | “We shift household responsibility from person to person.” (Sharabai et al, 2012, p. 69) |                                                     |
| Independence          | No item example given. (Cerezo et al., 2018)                                |                                                     |
| Expressiveness        | “Family members often keep their feelings to themselves.” (Buelga et al., 2017, p. 7) | Familial Behavior, Openness, and Independence       |
|                       | “In my family, we comment our personal problems.” (Ruiz et al., 2012, p. 1016) |                                                     |
|                       | “We are generally careful with what we say to each other.” (Muñiz, 2017, p. 577) |                                                     |
| Positive attitude     | “Even though I misbehave, my parents still offer me their support and affection.” (Cantero-García & Alonso-Tapia, 2017, p. 280) |                                                     |
| Patience              | “When I am very restless or nervous, my parents know how to relax me.” (Cantero-García & Alonso-Tapia, 2017, p. 280) |                                                     |
| Stress                | “When I am very angry, my parents lose their nerves.” (Cantero-García & Alonso-Tapia, 2017, p. 280) |                                                     |
| Reasoning vs. punishment | “My father/mother often makes me think about the things I have done wrong.” (Cantero-García & Alonso-Tapia, 2017, p. 280) |                                                     |
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which indicates that older individuals in particular have a greater influence than younger family members (Sbicigo & Dell’Aglio 2012). The dimension “control” includes, next to hierarchical structures, the handling of family rules or structures of order (Cerezo et al., 2018). Whether the family is chaotic or structured and orderly is described under the dimension of “organization” (Xia et al., 2016). Aspects of managing and structuring daily family life can be rigidly and stubbornly implemented or handled flexibly (Sharabai et al. 2012). Hence, adaptability refers to the ability of the family system to balance stability against change and is assessed by its level of flexibility, discipline, and negotiation of roles (Idan & Margalit, 2014). The ability to change roles, power structures, relations, and rules of the family system depends on situational and developmental stress (Olson & Gorall, 2006; Sharabai et al. 2012).

In addition to the emotional and structural aspects of the family, family climate is described with regard to attitudes and typical behavior, which can be subsumed under the family climate main dimension “familial behavior/openness/independence”. Parental reactions to adolescent misbehavior were measured using different parental coping strategies (positive attitude, patience, stress, and punishment versus reasoning). “Independence” and “expressiveness” within the family are included in this dimension. The quality of family openness was assessed by the “expressiveness” dimension, which describes how family members express their feelings using the example of communication (Buelga et al., 2017; Muñiz, 2017; Ruiz et al., 2012). Expressiveness means the “degree of tolerance and importance given in the family to the sharing of ideas and feelings” (Valdés-Cuervo et al., 2018, p. 154). A high degree of love and a low degree of conflict in the family does not necessarily mean that the family is open-minded and family members express their feelings. Expressiveness is not categorized in the originally assigned FES dimension of “relationship” because the “communication” dimension of FACES is understood as a third dimension. In summary, expressiveness in communication between family members is understood as familial behavior indicating openness in the family. With regard to parental coping strategies in the family environment, supportive and reassuring parental behavior is subsumed under the “positive attitude” dimension (Cantero-García & Alonso-Tapia, 2017). The dimensions “patience” and “stress” are used to check whether parents respond calmly in response to adolescent misconduct (Cantero-García & Alonso-Tapia, 2017). The dimension “punishment versus reasoning” describes whether parents punish or reason with adolescents when they misbehave (Cantero-García & Alonso-Tapia, 2017). Personal growth in the family is included in the “independence” dimension (Cerezo et al., 2018).

### (Positive and Negative) Family Climate and Social Adaptation

To answer the third Research Question (How does family climate influence adolescents’ social adaptation?), associations between family climate and adolescents’ social adaptation (see Table 3) are presented separately for positive and negative family climate, which is why these are briefly described. A negative family climate is characterized by numerous conflicts and a lack of esteem and support, which reduces the ability to create nonviolent solutions (Muñiz, 2017). Families with a negative climate displayed low cohesion, many conflicts, less support and expressiveness, and offensive communication with parents. A positive family climate was evidenced by warmth and acceptance, and was linked to high levels of expressivity, cohesion, support, system maintenance, positive attitudes, and patience, in addition to low levels of conflicts, less criticism, and reduced aggressive behavior among family members.

The third research question can only be partially answered because the body of this review mostly consists of cross-sectional studies (9/12 studies). In the view of longitudinal studies, results indicate that a positive family climate is a predictor of high academic self-regulation (Xia et al., 2016), better problem-solving skills in relationships (Xia et al., 2018), less relationship violence, and less hostile-aggressive adolescent behavior (Fosco et al., 2016). When considering the results, the heterogeneity of the studies in terms of age, methodology, origin of samples, and measurement instruments should be taken into account. For a more detailed description of all associations between family climate and dependent variables related to adolescents’ social adaptation were summarized in four categories based on content: school and self-perception (school attachment, academic self-regulation, self-esteem, and self-depreciation); emotions (loneliness, hope, sense of coherence, satisfaction in life, empathy, and shame); (cyber-) bullying; managing conflicts (hostile-aggressive behavior and relationship violence). A maximum of two studies examined the same aspects (see Table 3).

### School and Self-perception

A positive family climate was a good predictor of adolescents’ psychological adjustment (self-efficacy and positive self-esteem), and has been consistently associated with school attachment over time (Xia et al., 2016). Family climate and school attachment influenced each other, with each having unique and unidirectional positive effects on academic self-regulation (Xia et al., 2016). Adolescents in cohesive and supportive families felt more loved, approved of, and accepted and were more likely to have feelings of
self-worth and confidence (Sbicigo & Dell’Aglio 2012). A positive family climate with low levels of conflict, criticism, and aggressive behavior among family members can strengthen the concept of self. High rates of cohesion and support and low rates of family conflict were significant predictors of psychological adjustment, while self-depreciation and hierarchy exhibited a significant positive correlation (Sbicigo & Dell’Aglio 2012).

**Emotions**

Family climate showed associations with loneliness, hope, and the form of management parents chose. Loneliness was negatively associated with both cohesion and adaptability, while significant positive correlations were found between hope and cohesion and between effort and adaptability (Sharabi et al., 2012). Low levels of cohesion and hope were predictors of loneliness, while adolescents in families with high levels of cohesion were more likely to exhibit a higher sense of coherence regarding their personality strengths. It appears that family cohesion contributes to the developmental adjustment, personal strength, and relatedness of adolescents (Sharabi et al., 2012). Family behavior management climate, operationalized by four parental coping strategies (positive attitude, punishment versus reasoning, patience, and stress), was positively associated with adolescents’ satisfaction (Cantero-García & Alonso-Tapia, 2017). Family climate was positively associated with adolescents’ empathy, restorative management of shame, and the role of defender (Valdés-Cuervo et al., 2018). Moreover, positive parenting (positive family climate, parental support, and restorative discipline) promotes moral emotions, such as empathy and shame, which are associated with a defender role (Valdés-Cuervo et al., 2018).

**(Cyber-)Bullying**

Bullying is described as aggressive, repetitive, and deliberate behavior to abuse a defenseless victim (Cerezo et al., 2018). When this takes place via technology, it is termed cyberbullying (Buelga et al., 2017). Adolescents cannot be assigned exclusively to either a (cyber-)victim or (cyber-)bully role, and can potentially play both roles (Buelga et al., 2017; Cerezo et al., 2018). The results of this review showed important associations between family climate and the characteristics of (cyber-)victims and (cyber-)bullies. Victims are perceived in the family environment as unbalanced compared to those who are not bullied or those who are bullies (Cerezo et al., 2018). Cyber-victims were more likely to have less problematic family relationships compared to cyberbully-victims, who play both roles (Buelga et al., 2017), and exhibited no differences in family social climate compared to nonvictims (Cerezo et al., 2018). A positive family climate encourages adolescents to adopt a defender role, where adolescents protect themselves or other adolescents from bullying (Valdés-Cuervo et al., 2018). Cyberbullies had higher scores in family conflict than victims of cyberbullying (Buelga et al., 2017). High family conflict, low cohesion, and expressiveness predicted adolescents becoming either cyberbullies or victims (Buelga et al., 2017). Further, high levels of control and low levels of familial organization predicted adolescents becoming victims of bullying (Cerezo et al., 2018).

**Managing Conflicts**

Family climate was shown to be an important predictor of problem-solving skills and violent behavior in relationships. A positive family climate improves adolescents’ problem-solving skills in relationships (Xia et al., 2018) and supports them in managing disagreements (Fosco et al., 2016). A relatively stable and consistent influence of family climate on hostile-aggressive behavior was demonstrated in the study by Fosco et al. (2016). Family conflict predicts aggressive behavior by girls toward their partners in online environments (Muñiz, 2017). Adolescents in a positive family climate have been shown to be less likely to engage in relationship violence (Fosco et al., 2016; Xia et al., 2018). There is an indirect impact of family climate on adolescents’ relationship violence through the change in hostile-aggressive behavior over time (Fosco et al., 2016), and family climate is negatively related to positive reputation, which is linked to violent behavior (Ruiz et al., 2012).

**Discussion**

Family climate is often related to other concepts mostly defined by measuring instruments. There is a need to clarify the concept of family climate and highlight the potential of family climate in research on the social adaptation of adolescents in community samples. This review systematized the complex area of family climate, which led to an empirically based family climate model associated with adolescents’ social adaptation. Family climate includes cohesion, conflicts, and support among all family members and their relationships. It also involves the organization, hierarchy, and adaptability of the family, such as its maintenance and changes. Lastly, it includes behavior management and independence in the family and the way members express their feelings.
The results demonstrate that the term “family climate” is used quite often, but systematic research on community samples with adolescents is still lacking. The FCI was not used at all. A possible reason for this could be that the dimensions relate primarily to parental behavior. This means that family climate primarily relates to all family members, as was also shown by the rare measurement of independence of individual family members. Other measurements were used to assess family climate, and were often used incompletely, with no further explanation of the concept. Moos and Moos (1976) pronounced that each of the 10 subscales of the FES represented family climate; however, none of the reviewed studies examined all subdimensions. This could mean that the family climate is an effective and comprehensive way of describing the atmosphere of daily life in families. In line with the findings of Fosco et al. (2016), aspects of family functioning and family environment (cohesion, conflict, expressiveness, organization, and adaptability) were found to reflect the general family climate. The heterogeneity in this concept could also be due to the different countries of origin of the studies. For example, in Spain or the USA, FES is predominantly used, whereas in other countries, FACES (Israel) or ICF (Brazil) are more commonly used to assess family climate. More systematic research on family climate in community samples is needed to make more general statements.

This review shows that family climate appears to be a good predictor of adolescents’ social adaptation, although most of the studies were cross-sectional and examined also associations other than the impact of family climate. Further, the heterogeneity of the studies regarding age, sample size, study design, and data analysis must also be taken into account. Although the ages of adolescents in most studies range from 10 to 19 years, two studies examined particularly young adolescents (e.g., 10–11 years; Sharabi et al., 2012) and another study examined older adolescents (e.g., mean 19.5 years; Fosco et al., 2016). In addition, the range of sample sizes was quite large (287–1,536 adolescents), different methods were used for data analysis (e.g., cluster analysis, regression analysis, multivariate analysis, cross-lagged modeling, and structural equation modeling), and mostly cross-sectional studies were included, demonstrating different effects.

There are several implications for future research. First, family climate is often divided into positive and negative, which appears as two opposing poles. Families with balanced scores on cohesion and adaptability show better family functioning than families with very high or very low rates on both dimensions (Olson, 1986). As already indicated here, a closer look at positive and negative family climate is needed for a better understanding of this issue. Second, family climate is often reported in relation to risk and protective factors for adolescents’ outcomes, so future research should investigate this phenomenon further. Third, most studies in the corpus were cross-sectional. More longitudinal studies are needed to describe the impact of family climate on adolescents’ outcomes. Fourth, family climate was shown to be a good predictor of adolescents’ social adaptation. In the future, there should be further investment in research on family climate as an independent variable. Fifth, a maximum of only two studies examined the same aspect of adolescents’ social adaptation. Research about the impact of family climate in community samples is lacking, and more studies in this context are needed. Sixth, future research should specify the family climate concept and its associations with all dimensions of family climate. To emphasize the complexity of family climate, future studies should use at least one of each main dimension of family climate (relationship, system maintenance and change, and family openness/behavior/independence) to measure family climate.

This systematic review has several limitations. Most importantly, it included only 12 studies because the search strategy was narrow. This was due to the focus on adolescents’ social adaptation, and research in this area with community samples is still lacking, so the results of this systematic review are limited to this context. Only research on family climate in community samples and studies published in English were reviewed. Results of this review show that much research on family climate has been conducted in Spain. Studies in other languages, unpublished studies, or clinical studies could make an important contribution to research on family climate. Further, family climate was only reviewed as an independent variable, and adolescents’ social adaptation can also have an impact on family climate (e.g., school attachment; Xia et al., 2016). There are risks of bias in the outcome reports and thus in the comparison and interpretation of results, primarily in the different recording and presentation of family climate, the different ages of the participating adolescents, and the heterogeneous construct of social adaptation.

Conclusion

There are seldom definitions of family climate in research on adolescents in community samples and research has not sufficiently examined how family climate predicts adolescents’ social adaptation. The present review clarified the concept of family climate by giving a theoretically and empirically based definition, and showed that family climate is often used but not yet systematically captured. This means, dimensions of system maintenance and changes (adaptability, control, organization) were emphasized in the theoretical definition, but were hardly measured in the studies, similar to the dimension of independence. Other aspects such
as hierarchies or responsiveness were not mentioned in the theoretical definition but were measured in the studies to assess family climate. Combining the theoretically and empirically based definition of family climate, family climate of adolescents in community samples can be mostly described by the relationship between family members (cohesion, conflict, expressiveness). Further, this review highlighted the potential of family climate in adolescents’ social development. Family climate is an important predictor of many different aspects of adolescents’ social adaptation (especially for academic self-regulation, problem-solving skills in relationships, relationship violence, and hostile-aggressive adolescent behavior). It can be stated that the family climate concept represents the complexity of family life well by capturing emotional and systemic aspects, as well as behavioral patterns within the family. Those aspects are easier to change than the structural characteristics of the family (e.g., the educational background of the parents) and are shown to have important impacts on adolescents’ social adaptation. This is why family climate should be given more attention in future research, and of course, in future family interventions.

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Declarations

Conflict of interest The authors reported no conflicts of interest.

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