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Two Places to Call Home: (Co)Parenting and Adolescents’ Sense of Belonging After Divorce

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Where do I belong? It is a question that is relevant to everyone, but especially for youth growing up with divorced parents. Experiencing a sense of belonging, “feeling at home”, is a fundamental human need with important implications for the development and functioning of youth. For children, the family is typically the first and primary context to which they experience belongingness. Also during adolescence, when non-familial social contexts become more important, the family ideally remains the secure base from which they can develop themselves. A parental divorce makes experiencing family belongingness considerably more complex, as it involves drastic changes with regard to their living situation, their contact with parents, and the relationship between parents. Moreover, an increasing number of youth nowadays lives a substantial amount of time with each of their parents, which means they have two places to call home. To increase our understanding of how families reorganize after a divorce and how adolescents function within these families, this dissertation focused on adolescents’ sense of belonging after divorce. To this end, the two aims of this dissertation were (1) To examine associations between adolescents’ sense of post-divorce belonging to various social contexts on the one hand and their adjustment on the other, and (2) To examine family dynamics that may play a facilitating role in adolescents’ sense of family belonging, including coparenting and parenting behaviors of fathers and mothers, and aspects related to care and contact arrangements after divorce.
Two Places to Call Home

(Co)Parenting and Adolescents’ Sense of Belonging After Divorce

Zoë Rejaän
Colofon
Two Places to Call Home: (Co)Parenting and Adolescents’ Sense of Belonging After Divorce
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Two Places to Call Home
(Co)Parenting and Adolescents’ Sense of Belonging After Divorce

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(met een samenvatting in het Nederlands)

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Waar ik mij goed voel ben ik thuis

Erasmus
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CHAPTER 1

General Introduction
Most children in Western countries are born into traditional two-biological parent families, but for a substantial part of them, their family structure becomes more complex due to a parental divorce or separation before they reach young adulthood (Cavanagh, 2008; Sanner et al., 2018). In the Netherlands, this applies to over 80,000 minor children each year, and about 3 out of 10 fifteen-year-olds do not live in a household with both their biological parents (CBS Statline, 2018, 2019; Ter Voert, 2020). Whether it concerns the ending of a marriage or registered partnership, or of a cohabiting relationship of parents, these various forms of divorce have in common that family life has transitioned from one joint household to two separate parental homes. Due to societal changes, such as increasing gender equality among parents (see Goldscheider et al., 2015), and developments in Dutch divorce legislation, many children maintain contact with both their parents after divorce. While mother residence combined with regular father-contact is the most common, post-divorce arrangements in which the children reside with each parent for 30% to 70% of the time are on the rise (Spruijt & Kormos, 2010, 2014; Smyth, 2017; Steinbach et al., 2020). Many youth after divorce thus have two places to call home, at least to a certain extent. In this dissertation, we investigate how adolescents experience this living in two households after divorce through the notion of belonging – the fundamental human need to feel closely connected to others. In particular, we consider adolescents’ sense of belonging a conceptual tool that can advance our understanding of how families adapt and how adolescents adjust to living in a divorced family.

The Dutch Divorce Context
The increase in shared residence arrangements in the Netherlands is partly attributable to the Dutch government’s attempts to mitigate the adverse consequences of divorce for children through law reform. Since 1998, divorce law stipulates that after a divorce, parents automatically shared joint parental responsibility, unless it is not in the best interest of the child (De Bruijn, 2018; Nikolina, 2015). More importantly, in 2009, the Promotion of Continued Parenting and Proper Divorce Act came into force. This law obliges divorcing and separating parents with joint parental authority to formalize arrangements on the care and upbringing of minor children, thereby encouraging – but not prescribing – continued contact with both parents after divorce (De Bruijn, 2018; Staatsblad, 2008). Statistics indicate that about one third of all minors after divorce live roughly the same amount of time with both parents; so-called symmetric shared residence (co-ouderschap in Dutch). Further, evidence suggests that the majority of the remaining divorced families has arrangements in which children spend at least a third of their time in both households (i.e., asymmetric shared residence), or alternatively, arrangements in which they mainly reside with one parent but have
regular contact with the other (Spruijt & Kormos, 2010, 2014), yet exact statistics are not readily available. Even though this rise in regular contact with both parents after divorce is considered a positive development – generally in the interest of children – it does not mean that they adjust positively after a divorce (Baude et al., 2016; Nielsen, 2014).

**Divorce and Adolescent Adjustment**
Many studies have documented the risk a parental divorce poses for youth functioning, including their subjective wellbeing, mental health, and academic performance (Amato, 2010; Tullius et al., 2020; Weaver & Schofield, 2019). At the same time, it is evident that not all adolescents experience problems after divorce; there is a large variation in how and how strongly they react to it (Amato & Anthony, 2014; Lansford, 2009). The stressful circumstances and transitions after a divorce are thought to largely account for this individual variability (Amato, 2000, 2010; Kelly & Emery, 2003). These circumstances often include a decline in financial resources, exposure to conflicts between parents, diminished parenting, a decrease in contact with parents, and relocation to new homes and neighborhoods. Each change requires parents and youth to reorganize practically and emotionally in order to adjust to new post-divorce lifestyles, roles, and family identities (Campo et al., 2020). Moreover, a divorce should be viewed as an ongoing process that lasts until long after the initial separation, as it is often followed by additional transitions, such as future parental cohabitations, moves, remarriages and divorces (Amato, 2010). Thus, rather than solely thinking of a parental divorce as a stressful life event for youth, we consider the divorced family a context or reality that many adolescents face today. This dissertation specifically focuses on post-divorce belongingness in adolescence, referring to the developmental time from childhood to adulthood that extends roughly from age 12 to the late teens. It marks a critical point in the life course for accomplishing key developmental tasks (Smetana et al., 2006), such as the search for identity and a coherent sense of self (Erikson, 1968), and the development of capacities for exercising agency (Larson, 2000).

**The Role of Sense of Belonging**
One aspect of adolescent functioning after divorce that is rather understudied and could explain some of the variability in adolescents’ post-divorce wellbeing and problems is the extent to which adolescents feel they belong. Examining adolescents’ sense of belonging may offer a unique insight into adolescents’ experiences of growing up in two homes after a divorce, as it is a multidimensional concept with many predictors and outcomes that is central to youth development (Allen et al., 2021). According to Baumeister and Leary’s theory on belongingness (1995), human behavior is strongly driven by the fundamental need for meaningful
and long-lasting interpersonal relationships. Although operationalizations and measures of belongingness tend to vary across studies and scientific disciplines such as family psychology, educational psychology, or human geography, satisfying the need to belong theoretically involves two main criteria. First, belongingness requires frequent positive or neutral (not negative) interactions, and secondly, these interactions have to be part of an ongoing framework of mutual caring (Allen et al., 2021; Baumeister & Leary, 1995).

Already in the first stages of their lives, children seek security and protection from parents or primary caregivers. Initially, they do so for survival, but from an early age, children usually enjoy social interactions and display behavior motivated by their need for affiliation (Grusec & Davidov, 2007). Throughout childhood and adolescence, a positive family environment in which children feel safe, understood, supported, and connected has been found to promote their general wellbeing, as well as their psychosocial development, socialization process, and resilience more generally (Cavanagh, 2008; Gervais & Jose, 2020; Grevenstein et al., 2019). Such experiences of family belonging are conceptually distinct from the quality of relationships with fathers and mothers, in the sense that it is a more holistic construct that refers to the entire family, with properties beyond those of individual relationships (King & Boyd, 2016; King et al., 2015; 2018). Put differently, ‘The whole is greater than the sum of its parts’.

This conceptualization fits with the premises of family systems theory (Cox & Paley, 2003; Gavazzi, 2011; Minuchin, 1974), which considers the family a complex social system composed of interconnected and emotionally interdependent subsystems, such that interactions occurring within one subsystem affect interactions in the others. The way subsystems reorganize and adapt to a divorce, and the dynamics between subsystems therefore contribute to adolescents’ experiences of family belonging. With many adolescents alternating between two households, it is warranted to consider the divorced family in its entirety, yet to also differentiate between adolescents’ belongingness in maternal and paternal households when studying associations with their adjustment. Post-divorce dynamics of interest in this respect include how and what post-divorce living arrangements are made at the family-level, how fathers and mothers reorganize their parenting relationship at the coparental-level, and the extent to which adolescents’ contact with parents is maintained (i.e., in quantity) and perceived (i.e., in quality) at the parent-child levels. That is, although adolescents’ family environment may have changed as a result of the divorce, opportunities for connection remain, relationships take new forms, and the motivational drive for belongingness is likely the same. Satisfying adolescents’ need to belong after divorce is a necessary, yet a potentially more
difficult task compared to their peers from intact families (King et al., 2018; Visher & Visher, 2000).

Belonging is not limited to the families that youth grow up in, but instead can be viewed as a multidimensional concept. This is in line with developmental theories such as Bronfenbrenner’s bio-ecological model (2005), which stresses the complexity underlying youth functioning, and emphasizes that youth are embedded within multiple interacting social contexts that affect their development. As such, youth can and preferably will experience strong social connections to various contexts (Jose et al., 2012; Smetana et al., 2006). The main social contexts that have been subjected to research on youth belongingness and adjustment additional to the family are the school, the peer group, and the neighborhood (Jose et al., 2012; Law et al., 2013; Witherspoon et al., 2009). Particularly during adolescence, when social relationships outside the family become increasingly important, and provide both opportunities and challenges for belongingness (Branje et al., 2021; Gervais & Jose, 2020; Smetana et al., 2006), these non-familial contexts may have unique, joint, and potentially even compensating effects on adolescent adjustment when growing up in a divorced family.

Taken together, throughout the multiple transitions in family life that can occur after a divorce, adolescents’ sense of belonging may be a common thread in their functioning. The pattern of findings regarding the role of belonging in adolescent outcomes has been consistent, with belongingness being positively associated with positive indicators of health (Allen et al., 2021; Baumeister et al., 2007; King & Boyd, 2016). However, belonging has hardly been studied as a multidimensional concept in the context of parental divorce.

**Research Aims**
By addressing questions about adolescent belongingness when growing up in a divorced family, this dissertation will extend existing literature in various respects. For one, because even though many children nowadays grow up in non-traditional family forms, most of our current knowledge on family dynamics, belonging, and child development still stems from two-parent intact families. Secondly, youth perspectives have been rather neglected in research on divorce as well as in clinical and legal practice (Baracs & Vreeburg-Van der Laan, 2014; Coenraad, 2014; Mol, 2021; Van der Valk et al., 2020). Their perspectives should be taken into account because they can shed a unique light on family functioning after divorce. Parents and adolescents, for instance, commonly report differently about parents’ behaviors, with parents generally reporting their parenting behaviors more positively than their children. Also, such parenting dynamics are particularly
associated with adjustment to the extent that they are perceived by adolescents themselves (Janssen et al., 2021; Korelitz & Garber, 2016). Thirdly, unlike previous studies in the field, the studies in this dissertation focus on the family dynamics that occur in both maternal and paternal households post-divorce, aiming to gain insights into how factors are associated with adolescents’ sense of belonging in each household, and therefore potentially, with their adjustment after a divorce.

Moreover, the questions in this dissertation emanate from practice, where divorced families and professionals who work with them strive, but sometimes struggle, to reorganize family life in a way that is optimally supportive of youth adjustment. With the research and writing of this dissertation being inspired by insights from a variety of disciplines, we strive to expand our perspective on adolescents’ sense of belonging after divorce, as well as the scope of this research. By investigating common practical or family law related matters, such as the effects of a positive versus negative coparental relationship, or adolescents’ involvement in decision-making processes concerning post-divorce living arrangements, the aspiration is to both add to the empirical literature and to ultimately contribute to better-substantiated advice to all involved in this matter – whether through applicable practical implications or directions for future research.

In sum, the objective of this dissertation is to further our understanding of adolescents’ sense of belonging when residing in two homes after a parental divorce. To this end, the two aims of this dissertation are (1) to examine relations between adolescents’ sense of post-divorce belonging to their families, schools, peers, and neighborhoods, and their adjustment; and (2) to examine family dynamics that may play a role in adolescents’ sense of family belonging, including parenting and coparenting behaviors of fathers and mothers, and aspects related to care and contact arrangements post-divorce.

Methods
The studies in this dissertation are based on datasets from two research projects. Both datasets have the two distinctive features that they are primarily based on adolescent self-report data obtained using (online) questionnaires, and secondly, that adolescents from divorced and separated families were targeted without any exclusion criteria based on the time since the divorce. As such, these data provide first-hand and robust knowledge on what it is like for adolescents to grow up in a divorced family.

Two recent cohorts from the Dutch cross-sequential research project Students & Families [Scholieren & Gezinnen; Spruit & Kormos, 2010] are used, which aimed to
examine family functioning and youth adjustment in divorced and intact families (i.e., 2006–2018). For every cohort, self-report questionnaires were administered to multiple school classes from various primary and secondary schools throughout the Netherlands. This resulted in samples of students that were fairly representative in terms of degree of urbanization, school level, parental education, percentage of divorced families, and diversity in post-divorce living arrangements. Therefore, these cross-sectional data lend themselves well to examine family-structure based differences or co-occurrence of certain behaviors. The 2016 cohort contains measures on family functioning and adjustment of 251 students from divorced families. The 2018 cohort consists of a sample of 969 students, among which 191 students from divorced families and 778 students from two-parent intact families, for reference. In both cohorts, students are aged 10 to 19 years old \((M = 13.4)\), and those with divorced parents were on average approximately 6 to 7 years old at the time of their parents’ divorce.

Furthermore, two studies are based on a recent Dutch three-wave longitudinal study *Where do I Belong* [Waar hoor ik thuis; Branje et al., 2017], that followed adolescents and their parents from divorced families between 2019 and 2022, parallel to this dissertation research. The research project is embedded within Utrecht University's strategic theme *Dynamics of Youth*, which aims to cross disciplinary boundaries and collaborate with societal partners to advance our understanding of the conditions that shape youth development. The choice was made for a longitudinal study design, as this allows for unravelling the temporal ordering and bidirectionally of study concepts. Adolescents, fathers, and mothers from divorced families – particularly, but not exclusively those with shared living arrangements – were targeted through schools, legal and health care professionals, targeted advertisements, via students, and through snowball sampling. Informed consent regulations required families to proactively register for participation in the study, which resulted in a sample of 146 divorced and separated families of which about half have symmetric shared living arrangements. The 191 adolescents in this sample were aged 11 to 18 \((M = 14.3)\), and were on average approximately 7 years old at the time of their parents’ divorce.

**Outline of this Dissertation**

This dissertation contains a literature review and four empirical studies, presented in the next five chapters. These chapters have in common that they focus on how adolescents from divorced families perceive their direct social environment, their belongingness within different social contexts, and their adjustment. The chapters differ in their specific focus and research questions, and each empirical study is based on a different (sub)sample depending on the aim and focus of the study.
Together, the individual studies described in these chapters address the two aims of this dissertation, which are to examine the relation between adolescents’ belongingness and adjustment (Chapter 2 and 3), and to identify family dynamics that are potentially associated with adolescents’ belongingness (Chapters 2 to 6). A more detailed overview of the empirically tested relations in this dissertation is depicted in Figure 1, and described in the next section.

**Figure 1**
*Overview of Empirically Tested Associations in the Chapters in Relation to Aims*
Which factors and mechanisms play a role in adolescents' sense of post-divorce belonging, according to scientific literature?

Chapter 2 contains an interdisciplinary literature review, aiming to gain insight into the multitude of factors that potentially play a role in adolescents’ sense of belonging and adjustment after a parental divorce or separation. Different from past work, theoretical and empirical research from the fields of child and family psychology, linguistics, human geography, and law on the notion of belonging are integrated. Findings are discussed using Bronfenbrenner’s bio-ecological framework (2005), which distinguishes between factors at the micro-level (e.g., proximal contexts), meso-level (e.g., inter-connections between social contexts), exo-level (e.g., parents’ employment and geographic distance between parental homes), and macro-level (e.g., cultural and legal environment).

How is adolescents’ belonging to different social contexts related to their adjustment, and do these associations differ for those from intact versus divorced families?

The first empirical study is presented in Chapter 3 and examines adolescents’ sense of belonging in key social contexts in relation to their adjustment. It concerns a comparative study that investigates differences between adolescents from divorced versus two-parent intact families, based on the principles of family systems theory and the multiple transition perspective. First, it examines potential family structure-based differences in the extent to which adolescents perceive a sense of belonging to their families, peer groups, schools, and neighborhoods. Further, in a subsample of divorced families, it tests possible differences in belonging to paternal and maternal households and neighborhoods. Also, this study investigates independent and joint effects of adolescents’ sense of belonging on their adjustment, while also exploring family structure differences in these effects. Lastly, it tests the hypothesis that adolescents’ sense of belonging mediates the effects of a divorce on adolescent adjustment.

Can different post-divorce coparenting patterns be distinguished based on coparenting behaviors, and if so, do these patterns predict adolescent adjustment?

The cross-sectional study in Chapter 4 is the first study of this dissertation to zoom in on adolescents’ perceptions of family dynamics after divorce. Specifically, it examines parents’ behaviors in terms of their conflict, mutual respect and cooperation, communication, and triangulation. Latent class analysis is applied to test if findings of previous studies based on parent self-report data can be replicated using adolescent-reports, and whether comparable post-divorce coparenting patterns can be distinguished. In addition, this study assesses whether and how
these post-divorce coparenting patterns relate to adolescents’ self-reported internalizing and externalizing problem behavior. Indirectly, this study provides insight into how adolescents perceive coparental dynamics in their family environment to be predominantly positive or negative, and whether this relates to their adjustment.

**How are the quantity and quality of adolescents’ post-divorce residential and digital contact with each parent longitudinally related, and do they predict adolescents’ family belongingness?**

Chapter 5 focuses on parent-adolescent dynamics in relation to adolescents’ sense of family belonging, in light of the increasing availability and popularity of digital media and online communication technologies. Whereas prior research demonstrated the importance of the quantity as well as quality of residential contact after divorce, this study explores the supplementary role of the quantity and quality of digital contact between adolescents and parents. Using two waves of adolescent self-report data, this study examines longitudinal associations between the quantity and quality of both residential and digital contact. Further, it investigates the role of parent-adolescent contact in adolescents’ experience of belonging within paternal and maternal households.

**To what extent are parenting and coparenting behaviors predictive of adolescents’ autonomy in decision-makings and family belonging after divorce?**

The final empirical study of this dissertation is presented in Chapter 6, and approaches adolescents’ need to belong from a self-determination perspective (Ryan & Deci, 2000). This theory posits that, in addition to belongingness, adolescents must experience a certain level of autonomous and effective functioning for healthy psychosocial adjustment, and it regards parents as the most important figures to support adolescents’ needs. This study examines these theoretical inferences in the context of parental divorce, by focusing on adolescents’ specific post-divorce needs, and considering the need-supportive role of parents through dynamics in the parent-adolescent and coparental subsystems. Multi-informant three-wave longitudinal data are used to examine associations among parenting (parental warmth and autonomy support) and coparenting (coparental cooperation and conflict) on the one hand, and adolescents’ sense of autonomy in decision-making about living arrangements and family belonging on the other.

In the seventh and final chapter, the findings from each of the chapters are summarized in relation to the aims of this dissertation, and key findings and their implications for future research and practice are discussed.
CHAPTER 2
Adolescents’ Post-Divorce Sense of Belonging:
An Interdisciplinary Review
ABSTRACT

A considerable number of children face the divorce or separation of their parents globally every year. As parental divorce is often accompanied by changes in the home and social environment of adolescents, they may experience a diminished sense of belonging to one or multiple social contexts, such as the family, school, peer group or neighborhood, which can in turn affect their post-divorce adjustment. To gain insight into the mechanisms and conditions that play a role in adolescents’ sense of belonging following parental divorce, we have reviewed empirical research from multiple disciplines from a bio-ecological perspective. This review has shown that adolescents’ sense of belonging can be an important protective factor after parental divorce, and is affected by processes at the micro-, meso-, exo-, and macrolevel. However, extensive knowledge on the determinants and mechanisms that affect adolescents’ belonging in the context of divorce remains lacking. Recommendations for future research are given, as a more thorough understanding of the factors that promote belonging of adolescents in divorced families can be an important next step in promoting a higher quality of life for adolescents after parental divorce.

Key words
Sense of belonging, divorce, adolescents, interdisciplinary review

Reference

Author Contributions
ZR, IvdV, WS, AC, and SB conceptualized the study. ZR, IvdV, WS, AC, JH and SB were responsible for the collection of theoretical and empirical studies for this literature review. ZR wrote the manuscript, and all authors provided feedback on the manuscript.
INTRODUCTION

Every year, a large number of children are confronted with the divorce or separation of their parents. Past studies have consistently shown that parental divorce is generally related to increased behavioral, emotional, social, and academic problems and decreased general wellbeing of children, adolescents, and young adults (e.g., Amato, 2010). However, most children from divorced parents do not suffer from major psychological problems (e.g., Laumann-Billings & Emery, 2000; Kelly & Emery, 2003). The degree of individual variation in problem behavior within this group appears to be comparable to that in the group of children who have not experienced a parental divorce (Amato & Anthony, 2014). Particularly, the short-term stresses and long-term strains that precede and follow a divorce, such as moving to another house, diminished parenting after divorce, and having fewer economic resources, increase the risk for adolescents to develop a variety of problems (e.g., Amato, 2010; Kelly & Emery, 2003; Amato & Anthony, 2014).

A factor that can play an important role in the adjustment of adolescents growing up in divorced families is their sense of belonging. According to Baumeister and Leary’s (1995) belongingness hypothesis, which builds on core principles of Bowlby’s attachment theory (1979), and Maslow’s hierarchy of needs theory (1968), the need to belong is a dominant motivational factor for social behavior. More specifically, people have the need to form and maintain relationships in order to experience life as meaningful, a desire to be connected to a group, and to be involved in close, secure, and enduring interpersonal relationships (Baumeister & Leary, 1995). Accordingly, belonging to social groups is a key predictor of one’s well-being. Developmental research has indeed shown that belonging to social contexts like the family, school, peer group, or community can have unique, joint, and potentially even compensating effects on children’s and adolescents’ psychological, academic, social and emotional adjustment (e.g., Jose et al., 2012; King, et al., 2018; Witherspoon et al., 2009).

Although belonging is associated with positive outcomes across the lifespan, it is suggested to be particularly important during adolescence (Allen & Kern, 2017). That is, a major task in adolescence is the development of a coherent sense of self and identity (Erikson, 1968), and to develop a balance between autonomy and relatedness in relationships (Baumeister & Leary, 1995; Deci & Vansteenkiste, 2004). This can be rather challenging in a period in which youth also need to adjust to divorce related changes. Adolescents in post-divorce families may experience a diminished sense of family belonging, as divorce can be associated with factors like interparental conflict, reduced contact with either one or both parents, and changes in living arrangements (e.g., Braver et al., 2003; Osborne & McLanahan, 2007; Elam
et al., 2016). Similarly, divorce can have consequences for adolescents’ sense of belonging to other social contexts. Moving to a different house in a different neighborhood, or dividing time between two households and neighborhoods, can interfere with daily routines, including the transport to school, friends or hobbies, and therefore, with adolescents’ sense of school, peer, or neighborhood belonging (e.g., Bakker, 2015; Van der Klis & Karsten, 2009). Furthermore, many adolescents make the transition to secondary or even tertiary education. This requires them to make multiple transitions simultaneously – school, peer group(s) and community. The consequences of a parental divorce may thus cause additional strains. To improve adolescents’ post-divorce sense of belonging, and ultimately their post-divorce adjustment and wellbeing, it is crucial to understand how post-divorce circumstances affect belonging.

The Current Study

This review aims to evaluate the multiplicity of factors that play a role in adolescents’ sense of belonging and in their post-divorce adjustment. We consider belongingness to be a multidimensional, rather than unidimensional concept, as adolescents can belong to multiple social contexts. We address this multidimensionality by examining belonging to multiple contexts and considering parent-child, interparental, school, peer, neighborhood, digital media, geographical, and legal factors related to adolescents’ sense of post-divorce belonging. To this end, this review adopts Bronfenbrenner’s (2005) bio-ecological model as its theoretical framework, similar to previous studies on belonging (e.g., Allen & Kern, 2017; Law et al., 2013; Witherspoon et al., 2009).

Different from past work, this review takes an integrative and interdisciplinary perspective. Associations between adolescent adjustment, belonging, and family structure or parental divorce have mostly been studied from a monodisciplinary, usually social science, perspective. However, even within the social sciences there are wide variations in terminology with regard to our main concept, the sense of belonging. Past studies, for example, have focused on similar or closely related concepts such as engagement, attachment, bonding, support, or social connectedness (e.g., Antonsich, 2010; Cragss & Kelly, 2018; Jose et al., 2012). Moreover, although the notion of belonging is relevant to other scientific disciplines, it is often not recognized or studied as a (core) concept in these other disciplines, which hinders a shared understanding of the subject. We propose that integrating knowledge from different disciplines is an important first step towards a shared and possibly better understanding of the importance of adolescents’ sense of belonging in the context of parental divorce. From a linguistic angle, the use of language and the content of communication can affect the sense of belonging in
parent-child relationships after divorce. Human geography can add to our knowledge and understanding of adolescents’ belonging in relation to their post-divorce living situation, for example in two geographically distinct social environments. Finally, family law affects post-divorce belonging as it attributes parental responsibilities, provides norms about care and contact, and determines the extent to which adolescents are involved in coparental decision making after divorce.

Therefore, this literature review is based on a selective literature search in the fields of child and family psychology, linguistics, human geography, and law. Search platforms Web of Science/Social Science Citation Index (SSCI), PsycINFO, Scopus, ERIC, Kluwer Navigator, Legal Intelligence, EBSCO, Hein Online, PubMed, and Google Scholar were used to find empirical or theoretical English-language published research using search strings on family-, school-, peer-, and neighborhood belonging, social connectedness, interpersonal attachment, family structure, parental divorce, family relations, parent-adolescent communication, speech entrainment, communication accommodation, social geography, and family and divorce law. Additional relevant literature was found through citation search. Lastly, the authors, who are all experts in one of the scientific fields, provided additional literature based on their expertise. As a result, we were able to integrate findings from over a hundred studies that either examined belonging directly, or were considered relevant to the subject indirectly. As such, this review sought to provide a deeper understanding of adolescents’ post-divorce sense of belonging.

**A Bio-Ecological Perspective on Post-Divorce Belongingness**

Bronfenbrenner’s bio-ecological model of human development (2005) provides a framework for the diverse set of factors that play a role in adolescents’ post-divorce sense of belonging, as well as the interactions between these factors. According to this model, children’s growth, change, and development are influenced by proximal processes within and between the systems that constitute one’s environment: the micro-, meso-, exo-, and macrosystem. The model describes how adolescents are embedded within multiple social contexts simultaneously, and emphasizes that these contexts interact with each other to affect adolescent health and adjustment (see Figure 1).

The microsystemic social contexts that relate to adolescents’ sense of post-divorce belonging include the patterns of activities, social roles, and interpersonal relationships within the family-, peer-, school- and neighborhood context. Important mesosystemic contexts include the relations between the microsystems, for example between the mother- and father microsystem, between family and school,
and between family and friends. The exosystemic context includes the broader, as well as the indirect environment of the adolescent, the geographical space between parents’ homes, and their workplace. Additionally, influential factors on a macrosystemic level include a country’s societal and legal norms, for example concerning post-divorce shared care and residence arrangements.

Figure 1
A bio-ecological perspective (Bronfenbrenner, 2005) on adolescents’ post-divorce sense of belonging
An additional system distinguished by Bronfenbrenner is the chronosystem, reflecting time. It refers to changes that occur over an individual’s lifetime caused by events or experiences. As such, parental divorce alters the relationships between the child and its environment, creating a dynamic that can instigate developmental change (Bronfenbrenner, 1989). Experiencing a large number of successive changes after the parental divorce can be particularly harmful for adolescents’ mental and physical health (Amato, 2010; Pearlin, et al., 2005). This number of changes or transitions, rather than divorce itself, can be seen as the central variable that affects children’s wellbeing (Amato, 2010). A considerable part of children’s initial adjustment problems after a parental divorce may decrease or disappear over time (Chase-Lansdale & Hetherington, 1990). Still, divorce is often accompanied by later changes in family life, such as future moves or parental re-partnering, which can then cause new challenges (Adam & Chase-Lansdale, 2002; Amato, 2010; Anderson & Greene, 2013). Close relationships and proximal contexts in the lives of adolescents are therefore the most powerful predictor of their post-divorce development (Bronfenbrenner, 2005), and presumably of their sense of post-divorce belonging. We will review the factors in each of the systems postulated by Bronfenbrenner (2005): the micro-, meso-, exo-, and macrosystem.

On an individual level, there are many characteristics or factors that can determine how adolescents experience belongingness after divorce, how they adjust, and how the foregoing may be related to each other. For instance, studies have shown that the length of time since the divorce, adolescents’ demographic characteristics (gender, ethnicity), and their adjustment prior to the divorce all moderate the relation between divorce and adjustment (e.g., Lansford, 2009). Studies on belonging have revealed that factors such as gender, ethnicity, attachment, personality, coping mechanisms, and several childhood antecedents affect sense of belonging later in life (e.g., Allen et al., 2018; Chen et al., 2012; DeWall et al., 2011; Hagerty et al., 2007; King & Boyd, 2016). Although this study focuses on those systemic factors that are specifically relevant to adolescents’ sense of belonging in the context of parental divorce, individual factors are important to take into account too, for example as moderators, making some adolescents more vulnerable to systemic factors than others.

**MICROSYSTEMIC FACTORS**

The most direct interactions between the child and its environment take place in the microsystem (Bronfenbrenner, 1979). The microsystem encompasses adolescents’ relationships, interpersonal interactions, and immediate surroundings. Important examples are the family and daily home, often consisting
of two houses as a result of parental divorce, the peer group, the school, and the neighborhood they live in. Most knowledge on family, peer, school, and neighborhood belonging stems from research on developmental and educational psychology. Findings consistently show that belongingness – or social connectedness – to each of these social domains is related to a greater sense of well-being, and less emotional distress or other negative outcomes (e.g., Jose et al., 2012; Libbey, 2004; McGraw et al., 2008). For adolescents from divorced families, however, belongingness to each of these domains can be disrupted. In the first place, this can occur within the family system.

**Family Belonging**

Family belonging encompasses feelings of inclusion within one’s family, covering feelings of being understood, of having fun together, of being paid attention to, and of wanting to be present within the family (Goodenow, 1993; Leake, 2007). Divorce is often preceded and accompanied by factors that can, at least temporarily, disrupt adolescents’ belonging to their family. Particularly, reduced or disturbed contact with either one or both parents (Adamsons, & Johnson, 2013; Baude et al., 2016), lower quality parenting (Hetherington, 2006; Lansford, 2009), and interparental conflict (Amato, 2010; Lansford, 2009) can disrupt family belonging.

An important issue to be settled after parental divorce or separation is child custody and the arrangement of contact between the child and both parents. Generally, children are believed to function better and develop more favorably when they have a positive and supportive relationship with both parents after divorce. In line with this notion, national and international studies show that, nowadays, 20% to 30% of children grow up in shared residence arrangements after divorce (e.g., Poortman & van Gaalen, 2017; Nielsen, 2011). In addition, non-resident fathers are now increasingly involved in their children’s lives following divorce (Elam et al., 2016; Sobolewski & King, 2005). However, the fact remains, that for most children, there is a decrease in the amount of time spent with both parents, while parent-child contact is closely related to adolescents’ sense of family belonging and wellbeing (King et al., 2018). Additionally, when children come to live with the parent who was not the primary caretaker prior to the divorce, their wellbeing is typically lower. Put differently, the more a parent was involved in child rearing predivorce, the more important post-divorce contact with that parent is for children’s wellbeing (Poortman, 2018), and plausibly also for their sense of family belonging.

Another mechanism that can hinder adolescents’ post-divorce sense of family belonging is the disruption in parenting practices that may occur prior to and
following divorce, such as reduced child monitoring, sensitivity, and ability to provide warmth and affection (e.g., Hetherington, 1993; Kelly & Emery, 2003; Lansford, 2009). Especially for parents involved in frequent and intense interparental conflict, positive parenting can become more difficult, due to the so-called “spillover” of negativity from the parental to the parent-child subsystem (e.g., Repetti, 1987; Van Dijk et al., 2020).

Although adolescents growing up in divorced families generally report lower levels of family belonging and wellbeing than adolescents living in intact two-parent families (e.g., King et al., 2018; King et al., 2015; Cavanagh, 2008), the risk factors described above also provide opportunities for strengthening adolescents’ post-divorce sense of belonging. For example, evidence suggests that in divorced families, the quality of parenting from both father and mother is related to child adjustment (King & Sobolewski, 2006; Fabricius & Luecken, 2007; Sigal et al., 2011). In stepfamilies, it usually takes biological parents and stepparents special effort to ensure that children feel like they belong to this unit, as it is based on remarriage rather than biology. Still, in these families, the relationships between the adolescent child and its resident parents are the most determining factors in their sense of family belonging (Leake, 2007; King, Boyd, & Thorsen, 2015). These findings illustrate the importance of qualitatively good (step)parent-child relationships to promote family belonging.

The overall quality of communication between children and (step)parents is important in this context. Especially during adolescence, when parent-child relationships become more equal, interdependent, and reciprocal, there is usually a temporary decrease in the quality of parent-child interactions and an increase in conflict (Laursen et al., 1998; De Goede et al., 2009). Although in psychology much attention has been paid to emotional attributes of parent-child interactions, linguistics research indicates that the way in which language is used in such interactions is also a potential factor contributing to adolescents’ sense of belonging in divorced families. Two aspects of language use that may be associated with parent-adolescent belongingness are turn-taking management and speech entrainment. The quality of turn-taking in parent-child conversation can impact children’s social understanding (Ensor & Hughes, 2008). For example, ‘conflict’ turns – turns that express a threat, insult or prohibition towards a child – may signal the dominance of the caregiver in the conversation, which in turn may decrease parent-child connectedness (Lezin et al., 2004). Similarly, incompatibilities in adolescents’ and parents’ conversational styles, including different turn-taking habits and frequencies of interruptions and simultaneous speech are related to adolescent-parent discord (Beaumont, 1995).
Speech entrainment – the phenomenon that people tend to adjust their use of language (e.g., choice of word, tone of voice, and formulation) to that of their conversation partner (Giles et al., 1987; Levitan & Hirschberg, 2011) – is positively correlated with the quality of interpersonal relationships among adults (Buller & Aune, 1988; De Looze et al., 2013; Putman et al., 1984, Street, 1984). Limited research has shown that speech entrainment can foster feelings of attachment between parents and their children (Jaffe et al., 2001; Ko et al., 2016). Entraining to each other’s negative communicative behavior can have adverse effects. For example, when parents convey negative emotions to their children, adolescents will increase their own expressions of negative emotions which, in combination with different conversational styles, predicts higher levels of reported relationship conflict (Beaumont & Wagner, 2004). It remains to be investigated how speech entrainment in adolescent-parent interactions is related to adolescents’ sense of family belongingness prior or after divorce. However, existing research suggests that attention to turn-taking behaviors and speech entrainment might help parents and adolescents to stay connected, especially prior and after divorce, when parent-child conflict often increases and family cohesion decreases (Short, 2002).

**Peer Belonging**

During adolescence, when time spent with family typically decreases, engagement with peers increases (Smetana et al., 2006; Furstenberg, 2000), and connectedness to peers becomes more important for a healthy development (Bukowski et al., 2007). Secure attachments with peers can act as a supportive mechanism, buffering individuals against life’s stressors (e.g., Buhrmester, 1996; Fuller et al., 1999; McGraw et al., 2008; Valkenburg & Piotrowski, 2017). Low quality friendships, on the other hand, can pose a risk to adjustment problems for children who experience parental conflict, for example during or after parental divorce (Larsen et al., 2007). Additionally, lack of peer relationships and close friendships are related to unmet needs to belong, and to loneliness and depressive symptoms (e.g., Baumeister et al., 2007; Mellor et al., 2008; Adamczyk, 2018).

Qualitative studies have shown that it can be difficult for children in shared residence arrangements to stay in contact with peers and friends, due to the physical distance and shuttling between two households and neighborhoods. Also, children in shared residence arrangements can experience difficulties due to possible desires to spend time with a parent whom they have missed, rather than to spend time with friends (Marschall, 2014; Ottosen et al., 2011; Haugen, 2010). Other divorce-related factors that may affect adolescents’ peer relationships and sense of peer belonging, are their social-emotional problems and stress due to the divorce, and a lower parent-child relationship quality (Amato, 2010; Lansford,
2009). Finally, parental divorce nearly always causes family income reduction (Jeynes, 2002). This decline in parents’ financial resources can have consequences for adolescents’ possibility to undertake hobbies, buy clothes, hang out, or engage in activities with friends. These perceived constraints appear to be a risk factor for adolescents’ sense of peer belonging and wellbeing after divorce, since they limit their possibilities to meet and interact with their friends. In sum, how adolescents experience their post-divorce family life, including its challenges, dilemmas, and possibilities with regards to peer contact and perceived peer support, determines their peer belonging (Marschall, 2014).

**Family and Peer Belonging Trough Social Media Use**

Although strictly not a factor at the microlevel, the use of social media might provide opportunities for both family and peer belonging. The huge increase in the use of the internet during the last decades, and with it the development of new media and communication technologies, has stimulated research on how social media use can potentially promote children’s reconfiguration of important relationships after divorce (e.g., Saini et al., 2013; Mesch, 2006). Still, research on social media use has largely focused on negative media effects and problematic media use (Valkenburg & Peter, 2011), even though online communication creates opportunities for families and peer groups to connect (Valkenburg & Piotrowski, 2017; William & Merten, 2011; Mesch, 2003).

For divorced families, social media use can help family members in maintaining close relationships while being separated by distance (e.g., Pettigrew, 2009; Padilla-Walker et al., 2012; Mesch, 2003; Cole & Griffiths, 2007; Valkenburg et al., 2006). It provides opportunities for adolescents and their nonresident parents to keep in contact, and makes it easier to exchange information on practical matters. This subjective sense of closeness in situations of separation by time or space, and the opportunity to provide social support without being physically present, appear to contribute to a higher sense of social connectedness within families (Yarosh et al., 2014). Although findings have shown that the use of social media in daily life can improve parents’ perceived family connectedness (Williams & Merten, 2011), the effect on adolescents’ sense of post-divorce belonging has yet to be investigated.

For adolescents and their peers, social media also provide opportunities to stay in contact when apart. Nowadays, online and offline contact between adolescents merge smoothly, and online communication shows clear associations with positive psychological outcomes (Grieve et al., 2013). Online communication then leads to increased social involvement (Shapiro & Margolin, 2014). Although estimates vary by country, current data suggest that teens spend about two hours a day chatting
with friends via media such as WhatsApp, texting or Snapchat, as well as more than an hour a day on social media sites such as Facebook, Instagram and Youtube (Valkenburg & Piotrowski, 2017). This can positively influence adolescents’ psychosocial development and peer belonging, through enhanced peer relationships, more opportunities to affiliate, and increased occasions for self-disclosure (Shapiro & Margolin, 2014; Valkenburg & Peter, 2011), regardless of physical distance.

**School Belonging**

Although the objectives of schooling and education are primarily academic in nature, school settings also represent social worlds of major importance for children and adolescents (Eccles & Roeser, 2003; Wentzel & Looney, 2007). In this context, feelings of belongingness involve the extent to which students feel personally accepted, respected, included, and supported by others in the school environment (Goodenow, 1993). Both academic adjustment, including grades and perceived competence, and psychological adjustment, including self-worth, internalizing and externalizing problems, strongly depend on adolescents’ sense of school belonging (Pittman & Richmond, 2007). For adolescents, the school setting provides a larger group to belong to. School belonging has also been linked to prosocial behavior (Demanet & Van Houtte, 2012), and several other aspects of psychological well-being (Jose, et al., 2012; Pittman & Richmond, 2007; Allen & Bowles, 2012).

It has been established that children from divorced families generally have lower grades and a higher risk of early school drop-out than children from intact families (e.g. Sun & Li, 2001). Divorce has also been linked to an important non-cognitive educational outcome that seems to closely relate to school belonging: School engagement, which involves behavioral aspects, such as school attendance, homework and participation in class, but also more emotional aspects, such as interest in school and motivation to study (Dee & West, 2011). Evidence suggests a negative relation between divorce and school engagement, due to lower availability of financial resources, a decline in the quality of parent-child relationships, and high levels of parental conflict following divorce. Moreover, lower availability of financial resources is related to more strain on the family system and lower school engagement of children (Havermans et al., 2014). Hence, post-divorce relationships with and between parents are vital for children’s academic success and engagement in school (e.g., Bowen et al., 2008).

Furthermore, multiple individual, social, and environmental factors outside of the family system have been identified that relate to children’s sense of school
belonging, with teacher support being the strongest factor (Allen et al., 2018; Hattie, 2009). Children who believe they have a positive relationship with their teacher and report their teacher to be empathic and helpful in resolving personal problems, are more likely to experience a greater sense of belonging (Allen et al., 2018). Negative interactions with parents or peers can even be intervened by teachers (Hamre & Pianta, 2006), indicating the importance and potential protective value of school belonging for adolescents growing up in post-divorce families.

**Place-based and Neighborhood Belonging**

From a human geography perspective, adolescents not only belong to social settings like the family, peer group, or school, but also to their direct spatial environment. Place based belonging could be defined as the affective relationship between individuals and their environment, or an emotional feeling of being “at home” in a specific place (Antonsich, 2010). In this respect, home is a multidimensional concept (e.g., Van der Klis & Karsten, 2009). It can reflect a material setting where personal objects create a sense of domesticity and familiarity, such as the home. Home can be the familiar functional space where daily activities and social interactions with people outside the household take place, like a site to meet, to play and to ‘hang out’. Spatial proximity then influences the capacities of children and adolescents to cultivate friendships and enjoy leisure activities at both parental homes (Schier, 2015).

In post-divorce families, the practice of living and being together is geographically fragmented and limited in time (Nimmo & Schier, 2019), and could interrupt the familiarity of the routine of daily life. Moving between different households not only traverses physical space, but also emotional space and psychological space (Schier, 2016). Consequently, family members are confronted with several responsibilities to be tackled, such as complex time–space coordination, exchanging information and managing the logistics of possessions and necessities. Adolescents’ direct spatial environment, including their homes, therefore plays an important role in their general sense of belonging. When adolescents live in different households and neighborhoods, this may interfere with their use of specific places, daily activities, and thus, their sense of neighborhood- or place-belonging.

**INTERCONNECTIONS BETWEEN MICROSYSTEMS**

Mesosystems can be considered as opportunities to build a bridge between two different settings, thereby providing consistency and familiarity in adolescents’ lives. The most important, but probably also the most difficult mesosystemic bridge to build following parental divorce, is the one between the mother and father microsystem.
Shared Residence

Although the majority of children primarily live with their mother after a parental divorce, there has been a substantial increase in father involvement, and sociological research shows that children and adolescents nowadays increasingly grow up in shared residence arrangements (e.g., Nielsen, 2011; Poortman & van Gaalen, 2017). Maintaining relationships between children and their two parents is generally regarded as most optimal for children’s development (e.g., Vanassche et al., 2013; Nielsen, 2014), but some researchers have indicated that recurring transfers between homes can create a feeling of instability and even insecurity. Three forms of so-called alternation can be identified (Baude et al., 2010). Firstly, relational alternation refers to the continuity of the mother-child and father-child relationships, despite regular interruptions by periods spent apart from each other. Secondly, spatial alternation relates to the commute between two households. And thirdly, childrearing alternation requires adolescents to deal with discrepancies in routines, practices, values, and parenting styles of the mother and father. According to research on spatial mobility, overlapping everyday worlds make it easier to cope with challenges after a divorce, although this requires a certain amount of parental cooperation, low levels of conflict, and also material objects (like toys, photos) that facilitate the transition (Schier, 2016). In addition, findings from family psychology indicate that ideally, parents not only ‘share parenthood’, but also try to actively support each other’s parenting, while maintaining healthy but flexible boundaries (Adamsons & Pasley, 2006). Key factors for coparenting are mutual respect and cooperation, frequent communication, and minimizing the occurrence of parental conflicts and adolescents’ involvement therein (e.g., Authors, 2020). A cooperative post-divorce coparental relationship allows adolescents to experience belongingness to both parental households, regardless of whether they grow up in shared residence arrangements or not.

The Social Connectedness Model

Although it is based on intact families, the Social Connectedness Model (Law, Cuskelley, & Caroll, 2013) may also be able to provide an overarching mesosystemic approach on adolescents’ post-divorce sense of belonging. Based on Bronfenbrenner’s ecological framework (1979) and Bowlby’s attachment theory (1979), it suggests that parenting practices, family climate, and family structure predict family connectedness, which in turn predicts children’s perception of peer and school connectedness. It proposes that children’s positive perceptions of parenting practices and family climate develop and maintain their overall sense of family connectedness. As with attachment, these perceptions reinforce internal working models of relationships and enhance a general level of functioning. This is not only important for experiencing belongingness to different social domains, but
also has additive positive effects on children’s adjustment in intact families (e.g., Law et al., 2013; Witherspoon et al., 2009; McGraw et al., 2008; Jose et al., 2012). Whether the principles of the Social Connectedness Model also apply for divorced and separated families, is yet to be investigated.

THE INDIRECT ENVIRONMENT

The exosystem is regarded as an ecological, broader setting in which the adolescent is not actually situated, but is nonetheless influenced by (Bronfenbrenner, 2005). The way parents arrange the care for their children after divorce, for example, has direct effects on adolescents’ family belongingness, but these contact and care arrangements are often influenced by indirect factors outside the family system. For instance, sociological findings suggest that parents who practice shared residence arrangements or joint physical custody appear to differ in at least two significant ways from the majority of separated or divorced parents: They tend to be highly educated and generally have a higher socio-economic status (e.g., Baude et al., 2016; Poortman & van Gaalen, 2017; Steinbach, 2019). Practical considerations regarding parents’ employment situation seem to play a role as well, but the popularity of shared residence among highly educated parents is likely also due to their more egalitarian gender-role attitudes, and generally greater financial resources (Poortman & van Gaalen, 2017). Shared residence, though, appears to be the least enduring care arrangement in comparison with mother or father residence. Firstly, father’s employment situation has been found to predict change in care arrangements, especially in cases of long commutes and working hours. Secondly, when fathers have a new partner, a change from shared to sole residence is more likely than in cases where the father lives alone (Poortman & van Gaalen, 2017). And thirdly, older children and adolescents may no longer want to alternate between two homes in the longer run, and are better able to articulate this (Poortman & van Gaalen, 2017). Particularly, shorter geographical distance between the paternal and maternal residences has been found to play a crucial role in maintaining shared residence (e.g. Skjørtten & Barlindhaug, 2007; Bakker & Mulder, 2013), and this may also promote adolescents’ sense of post-divorce belongingness.

A final indirect factor that can be important regarding adolescents’ post-divorce sense of belonging is a family’s financial resources. Financial resources have been mentioned several times in this review, since family income reduction can be a significant stressor for many adolescents, resulting in disruptive changes in residence, parenting, friends, school, and child care arrangements (e.g., Kelly & Emery, 2003; Lansford, 2009; Sun & Li, 2009; Jeynes, 2002). The economic effects of divorce, however, also partly depend on a major macro-factor: Divorce law.
THE MACROSYSTEM

The macrosystem entails the largest and most distant set of factors that are able to influence adolescents living in divorced families. Varying from country to country, divorce law serves as an institutional arrangement that helps to manage the consequences of divorce, and to reduce its economic effects. In many Western countries, financial laws are in place that require child support payments to be made following parental divorce, although countries differ in terms of rules for determining payments. Countries also differ regarding requirements for spousal maintenance. And although the division of property following parental divorce is usually up to separating couples to agree on, a court will determine on this if couples cannot. All these laws are present to contribute to financial stability in divorced families (Vaus et al., 2017).

When it comes to adolescents’ sense of post-divorce belonging, however, other aspects of divorce law may even be more influential. Firstly, divorce law determines how parents and children go through the process of divorce. The procedure itself, requirements as to whether legal representation is required, the duration, and whether all divorce related issues are processed together or need different legal proceedings, differ from country to country. Little comparative divorce procedural law research has been undertaken so far, and although it has been suggested that law procedures, or lack of legal representation, can have serious effects on families, especially little to none is known about its influences on parent and child wellbeing and sense of belonging.

Furthermore, the law on parental responsibilities, and care and contact after separation is relevant. Formerly married parents generally have shared parental responsibilities after divorce, meaning that both parents make decisions on child related issues. Nonetheless, the extent to which one parent can make decisions alone differs per country. In the Netherlands, for example, minor everyday decisions can be made by one parent, whereas all important issues have to be decided on by both parents together. These include decisions on schooling, medical treatment, the issuing of a new passport, and the child's place of residence.

The content of these decisions, as well as the level of collaborative decision-making, can directly affect adolescents’ sense of belonging. In terms of content, the decisions mainly shape the adolescents’ direct (home) environment and the amount of contact with parents and other important family members. In terms of decision-making, evidence shows that respect and cooperation between parents is usually in the best interest of the child (e.g., Beckmeyer et al., 2014; Amato et al., 2011). In addition, there is now more consideration of the need for children to be
acknowledged, and the value of their views being heard in parental decision-making processes (e.g., Bruning et al., 2020; Cashmore & Parkinson, 2007; Cashmore, 2011; Lamb et al., 2015). The right to be heard is part of the Convention on the Rights of the Child, and is sometimes used to build a moral case for the inclusion of children’s views and perceptions in decision-making (Cashmore, 2011). Although its impact on children’s belonging and wellbeing has hardly been investigated, studies on developmental psychology and law suggest that most children want their views to be taken seriously by parents or professionals, rather than to make decisions themselves (Birnbaum & Saini, 2012; Cashmore, 2011; Fehlberg et al., 2018). Examples of this are involvement of children in parents’ decisions, and flexibility in schedules and agreements. For adolescents, who typically strive for increasing autonomy, and for instance want to decide for themselves where to spend their weekend, this may be particularly important. In addition, for the children and adolescents involved, it is a marker of respect and trust, and an acknowledgement of their needs for dignity, respect, selfhood and agency (Cashmore, 2011). In other words, these adolescents need to feel heard and understood, which may be linked to belonging.

DISCUSSION AND CONCLUSION

The aim of this review was to gain insight into the multiple factors that affect adolescents’ sense of belonging and subsequent psychosocial adjustment after parental divorce. We took an interdisciplinary perspective, and used a biocultural framework, examining factors at the micro-, meso-, exo-, and macrolevel. This review provides an original contribution to the existing literature on belonging and divorce that transcends disciplines.

Starting with the microsystem, the most proximal and influential environment of the adolescent, this review demonstrates the drastic changes adolescents usually experience following a parental divorce. New living arrangements, diminished contact with either one or both parents, less sensitive parenting, and exposure to parental conflict are risk factors for adolescents’ feelings of connectedness to their family unit. Yet, evidence suggests that the quality of the relationship and communication between the adolescent child and its resident (step-)parent(s) is fundamental to adolescents’ sense of family belonging, and therefore an important protective factor. Due to possible increased social-emotional problems, stress, and practical and financial changes caused by the parental divorce, adolescents’ sense of belonging to their peer group, school, and neighborhood is likely threatened. At the same time, these microsystems provide a unique opportunity for friendships, support, security, familiarity and belonging in a potentially hectic time of life.
The contributing value of a bio-ecological approach to adolescents’ belonging and adjustment after divorce is demonstrated by studies on the experiences within and interactions between contexts that eventually affect adolescents’ health, adjustment, and post-divorce sense of belonging. On meso-level, co-parents have a particularly important role after divorce in facilitating a smooth transition between adolescents’ overlapping everyday worlds, by maintaining a cooperative post-divorce coparental relationship. Whether co-parents manage to practice a shared residence arrangement (joint physical custody) seems to partly depend on exosystemic factors, like parents’ education, social-economic status, employment situation, and geographical distance between the paternal and maternal residences. Finally, on a macrolevel, divorce law can potentially impact adolescents’ sense of post-divorce belonging, through its implications for the divorce process, parental responsibilities regarding care, contact, and decision-making, and lastly, the involvement of adolescents themselves in the divorce process. How this process takes place exactly, and what its effects are, however, remains to be investigated.

To conclude, this review shows that adolescents’ sense of belonging can be an important protective factor after a parental divorce, but it depends on a complex interplay of determinants that are embedded in multiple contexts. To understand and improve adolescents’ post-divorce sense of belonging, combining theory and empirical evidence from different (sub)fields is required, including child development and family sciences, psychology, linguistics, human geography, and family law. In conducting this review, it became clear that there are still many gaps in our knowledge on individual, parent-child, interparental, child-school, child-environment, digital media, and legal factors that play a role in adolescents’ sense of belonging, in particular after parental divorce.

**Suggestions for Future Research**

This review also serves as a first step towards understanding the concept of belonging as a multi-dimensional determinant in adolescents’ post-divorce adjustment, and demonstrates the need to study post-divorce belonging using an interdisciplinary approach. Specifically, it is suggested for future research to investigate to what extent adolescents’ sense of belonging to specific social contexts, like the peer group, school, and neighborhood, can individually contribute to their post-divorce adjustment. Moreover, we recommend that the interconnections between these contexts are further explored, as well as their possible additive positive effects on adolescents’ adjustment, as is suggested by Law and colleagues’ Social Connectedness Model (2013) based on intact families.
Meaningful suggestions for further research can be derived from this review, such as examining how adolescents experience their living arrangements after divorce, how these arrangements affect their relationships and activities with friends, to what extent they participated in parental and/or legal decision-making processes, and how they are adjusted in relation to these aspects. Integrating expertise from researchers from different scientific disciplines could result in innovative designs to research post-divorce belonging, as research methodology can vary widely between disciplines. Longitudinal questionnaire and observational studies in which children and adolescents from divorced families are followed over time could be combined with speech analysis, and qualitative methods such as in-depth interviews, auto photography or photo elicitation, investigation of legal texts and file investigation. Using a variety of research methods and sources (i.e., methods triangulation) to examine the interplay of different factors at different levels of complexity will improve the clarity and precision of research findings, which will ultimately result in an integrated understanding of a complex societal issue such as belonging after divorce. These insights will provide essential input to the legislator and policymakers dealing with law in post-divorce families. Furthermore, professionals such as judges or social workers could benefit from this understanding of relevant factors, as it could contribute to making better choices in the context of legal conflicts or specialized care after divorce. Additional research into the individual characteristics and demographics that influence adolescents’ post-divorce belongingness could contribute to the practical applicability of possible new knowledge. In conclusion, a more thorough understanding of the conditions and mechanisms that play a role in adolescents’ belongingness could be an important next step in promoting a more optimal life for adolescents after a parental divorce, as it may feed into better substantiated advice to all stakeholders: youth professionals and legal advisors in the clinical field, policy makers at state level, municipalities, housing associations, and schools at local level, and above all, parents and adolescents in divorce situations.
CHAPTER 3

The Role of Sense of Belonging and Family Structure in Adolescent Adjustment
ABSTRACT
The present study adopted an ecological perspective, and examined effects of adolescents’ sense of belonging to multiple social contexts in relation to their adjustment, as well as possible differences between adolescents from intact and divorced families. Self-report questionnaires were used to investigate perceptions of family, school, peer, and neighborhood belonging among 969 adolescents (Mage = 13.4; 51.6% girls). Results showed that mean level differences in belonging exist based on family structure, and that levels of family and neighborhood belonging vary between post-divorce maternal and paternal households. For all adolescents, sense of belonging predicted self-reported well-being, internalizing, and externalizing problems. Belonging was found to partly explain the relation between divorce and adjustment. Improving adolescents’ belonging could therefore be an important step in ensuring a better adjustment post-divorce.

Keywords
Belonging, Family Structure, Divorce, Adolescent Adjustment

Reference

Author Contributions
ZR, IvdV, and SB conceptualized the study. IvdV and ZR were responsible for the collection of data. ZR analyzed the data, and wrote the manuscript. All authors provided feedback on the manuscript.
INTRODUCTION

Every year, a considerable number of children experience the divorce or separation of their parents. Compared to children from intact families, they have an increased risk of a variety of problems that potentially persist well into adolescence and adulthood (Lansford, 2009; Amato, 2010). However, there is substantial variation in the extent to which these problems arise (Amato & Anthony, 2014). This variation is partly determined by certain characteristics of family functioning, such as increased interparental conflict, decreased quality of parenting, diminished parent-child contact, and reduced quality of parent-child relationships (e.g., Amato, 2010; van Dijk et al., 2020). Moreover, these family processes might undermine a fundamental human need: The need to belong. A more thorough understanding of the role of adolescents’ sense of belonging in psychosocial outcomes could contribute significantly to promoting their adjustment after divorce. So far, most of our knowledge about the relation between belonging and adolescent adjustment stems from research on intact families. Given the substantial changes in family functioning that follow parental divorce, this knowledge cannot just be generalized to divorced families. Therefore, the current study examined the role of sense of belonging and family structure in adolescent adjustment.

The Need to Belong

The need to belong is a fundamental human desire to form and maintain enduring interpersonal relationships, to feel connected to others, and to feel needed and valued by them (Baumeister & Leary, 1995; Hagerty et al., 1992). For most, this originates from first strong relationships with parents or other primary caregivers (Lee & Robbins, 1995; Mellor et al., 2008). A positive family environment, in which children can feel supported and understood is an important protective factor for child adjustment and development later in life (King et al., 2018; Leake, 2007). It plays an essential role in the development of children’s internal working models of relationships with others, and the need to belong will continue to be a prominent motivation for interpersonal behavior (Baumeister & Leary, 1995; Hagerty et al., 1992). Particularly during adolescence, when social relationships outside the family become increasingly important and youngsters preferably develop a balance between autonomy and relatedness in relationships, a strong sense of belonging is key for positive adjustment (e.g., Baumeister et al. 2007; Deci & Vansteenkiste, 2004; Jose et al., 2012). As adolescents are embedded within multiple social contexts that jointly influence adolescent development (Bronfenbrenner, 1979), belongingness should be understood through a broader ecological lens, including the family, peer group, school, and neighborhood.
Within the family system, belonging refers to feeling included within the entire household, of being understood, having fun together, wanting to spend time together, and being paid attention to (Goodenow, 1992; Leake, 2007). A high sense of family belonging is protective against adolescents’ emotional distress (Cavanagh, 2008), delinquency, substance use (King et al., 2018), and academic problems (Crosnoe & Elder, 2004), while it promotes life satisfaction and future orientation (Jose et al., 2012). Low levels of peer belonging, for example due to a lack of peer affiliation, absence of close friendships, or weak group membership, may result in loneliness (Adamczyk, 2018; Mellor et al., 2008) and behavior problems (Baumeister et al., 2007; Newman et al., 2007). Belonging to the school context, which is studied as school engagement, attachment, or bonding (Libbey, 2004), is strongly related to psychological and academic outcomes as well, including problem behaviors, self-worth, grades, and perceived academic competence (Allen & Bowles, 2012; Pittman & Richmond, 2007; Pittman & Richmond, 2008). The neighborhood might also provide important ecological assets for adolescents in terms of belonging. Perceived neighborhood support is positively associated with adolescents’ life satisfaction (Oberle et al., 2011), as well as several indicators of thriving, such as having high expectations of oneself, and holding a positive identity (Theokas & Lerner, 2006; Theokas et al., 2005).

Several studies have examined belonging to multiple contexts or the interplay between multiple contexts to which adolescents can belong. Generally, it seems that a high sense of belonging to more contexts is associated with more positive psychological and academic outcomes for adolescents (Jose et al., 2012; Law et al., 2012; Witherspoon et al., 2009). Some findings also suggest a so-called substitution hypothesis, which presumes that lack of connection to one context may be compensated by strong connections to other contexts (Costa et al., 2005; Witherspoon et al., 2009). This implies that a general connection to any context in itself can be a protective factor and might buffer effects of low belonging in another context.

**Divorce and Belonging**

Particularly in divorced families, in which family relationships can come under pressure (Peris & Emery, 2005), it is relevant to investigate if and how non-familial social environments can have a positive, potentially compensatory effect on adolescents’ adjustment. According to family systems theory (Cox & Paley, 1997; Minuchin, 1974), adolescent adjustment can be understood within the context of their larger family system, as well as mutual influences among family subsystems. The negative family processes that are often followed by a parental divorce, can therefore (at least temporarily) disrupt adolescents’ sense of family belonging. In
particular, reduced or disturbed contact with either one or both parents (Adamsons, & Johnson, 2013; Baude et al., 2016), lower quality parenting (Hetherington, 2006; Lansford, 2009), and interparental conflict (Amato, 2010; Lansford, 2009) can affect family climate. Previous studies have indeed indicated that parental divorce is related to lower levels of family belonging (Aslanturk & Mavili, 2020; Cavanagh, 2008; King et al., 2018). More specifically, adolescents living with two biological parents generally reported higher levels of family belonging and well-being than adolescents living with single parents, in married or cohabiting stepfamilies (King et al., 2018) or other non-intact family forms (Cavanagh, 2008). Nowadays, though, a majority of children in Western countries have contact with both parents after divorce and shared custody is increasing (e.g., Poortman & van Gaalen, 2017; Nielsen, 2011), so it is important to examine belonging to both parental households to which adolescents can belong.

Furthermore, parental divorce may also have consequences for belonging to other social contexts. Amato’s (2010) multiple transition perspective suggests that divorce should not be understood as a single transition, but as a series of transitions. Children can experience substantial changes in various aspects of their lives, both during the divorce and later on, for example when parents introduce new partners, decide to cohabitate, remarry, and potentially divorce (Kelly & Emery, 2003). This often includes moving, dealing with less financial means, and adapting to new daily routines, such as transport to school, friends, or hobbies (Bakker, 2015; Van der Klis & Karsten, 2009). These changes may impact adolescents’ feelings of belonging to the broader social context, at school, with friends or to the neighborhood. In line with this, we hypothesize that adolescents’ perceptions of belonging to their social environment might be lower in divorced families than in non-divorced families and that belonging may mediate the relation between family structure and adolescent adjustment.

**The Current Study**

This study examined the role of sense of belonging and family structure in adolescent adjustment. First, we investigated whether adolescents from intact and divorced families experience different levels of belonging to their families, peers, schools, and neighborhoods [RQ.1]. In line with family systems theory and in line with a multiple transitions perspective, we expected that adolescents from divorced families on average report lower levels of belonging to all social contexts, even when controlling for interparental conflict and parent-child relationship quality. Second, for divorced families, we examined differences in family and neighborhood belonging separately for paternal and maternal households [RQ.2]. Based on the assumption that contact frequency is positively associated with
adolescents’ perceptions of belonging, and children after divorce typically spend more time with mothers, we expected higher levels of belonging in maternal than in paternal households. Third, we examined both main and interaction effects of adolescents’ sense of belonging on adolescent adjustment, while also exploring family structure differences in these effects [RQ.3]. Based on previous studies, we expected that adolescents’ sense of belonging to multiple contexts would have unique and joint effects on adolescent outcomes. Finally, we tested the hypothesis that sense of belonging mediates the effects of divorce on adolescent adjustment [RQ.4].

**METHODS**

**Procedure**
Data for the current study were collected within a cross-sectional research project on adolescents’ sense of belonging. Using self-report questionnaires, quantitative data were collected at various primary and secondary schools throughout the Netherlands. Students from Utrecht University introduced and administered the questionnaires during school hours within 45 classrooms divided over 13 different schools. The participants completed the questionnaires individually, anonymously, and voluntarily after active consent from schools, and passive informed consent from parents and participants themselves.

**Sample**
A total of 983 adolescents from two-parent, intact (N = 780), divorced (N = 191), widowed (N = 9), and adoptive or foster families (N = 5) completed the questionnaires. After selecting adolescents from intact and divorced families, the final study sample consisted of 969 adolescents, aged 10 to 19 years old (M = 13.4, SD = 1.6), of which 48.4% males and 51.6% females. Of these adolescents, 14.8% attended their penultimate or final year of primary school, whereas 85.2% attended secondary school, for whom the level of education varied from low (14.8%), medium (44.0%) to high (26.4%).

Within the divorced subsample, 129 adolescents came from formally divorced families, and 62 from formerly cohabiting, now separated families. Respondents’ age during their parents’ divorce or separation ranged from 0 to 18 years old, with an average age of 6.7 years (SD = 4.0). Time since divorce ranged from 0 to 15 years, with an average of 6.9 years (SD = 4.1). Current living arrangements were measured with the Residential Calendar (Sodermans et al., 2014). This is a visual depiction of a regular month, in which participants were asked to indicate whether they typically stay with their mother or their father, for each day and night. For every participant, the proportion of time with each parent was calculated, which finally
resulted in four distinct residential situations: 21.5% of the adolescents reported living solely with their mother, 41.9% living mostly with their mother, 31.9% living with both parents a roughly equal amount of time, and 4.7% living mostly or solely with their father.

**Sense of Belonging Measures**

**Family Belonging.** Family belonging was measured as a mean score on four items, each with response options ranging from 1 (very little) to 5 (very much), similar to King & Boyd (2018): “How much do you feel your family understands you?”, “How much do you feel you and your family have fun together?”, “To what extent do you feel your family pays attention to you?”, and “How much do you feel you want to leave home?” (reversely coded).

Given that adolescents from divorced families can belong to multiple households, we adjusted the phrasing of items depending on family structure. Whereas adolescents from intact families were questioned about their sense of belonging to their family as a whole (*Belonging to Intact Family*, α = .83), adolescents from divorced families reported separately on their sense of belonging to their father's homes (*Belonging to Father's Family*, α = .90) and mother’s homes (*Belonging to Mother’s Family*, α = .81). It should be noted that adolescents only reported about belonging to a parent’s family home in case of contact with that parent. To facilitate family structure comparisons, we first computed a single score of *Belonging to Divorced Family*, weighted by the amount of time adolescents approximately spend at their parents’ homes (either 0%, 25%, 50%, 75% or 100%), and then merged *Belonging to Intact Family* and *Belonging to Divorced Family* scores into a single score: *Family Belonging*.

**School Belonging.** School belonging was measured with a shortened version of Goodenow's (1993) Psychological Sense of School Membership Scale. Participants evaluated 6 statements on a Likert scale ranging from 1 (not at all true) to 5 (very true). Exemplary items are: “The teachers here respect me” and “I feel proud of belonging to my school”. Internal consistency was good (α = .81).

**Peer Belonging.** Peer belonging was measured with two scales of the Harter’s Perceived Competence Scale for Children (1982): Social acceptance and close friendships. Both scales consisted of 5 statements, which participants evaluated on a Likert scale ranging from 1 (not at all true) to 5 (very true), such as “I am popular with my peers” (Social Acceptance), and “I don’t have a friend with whom I can share personal thoughts” (reverse coded, Close Friendships). Internal consistency of the 10 items was acceptable (α = .75).
Neighborhood Belonging. Neighborhood Belonging was measured with items derived from two scales of the Neighborhood Youth Inventory (Chipuer et al., 1999), regarding adolescents’ experiences with activities and friendships in their neighborhoods. Participants evaluated 8 statements on a Likert scale ranging from 1 (not at all true) to 5 (very true), such as “There are things for kids my age to do in my neighborhood” (Activities), and “When I want, I can find someone to talk to in my neighborhood” (Friendships).

Similar to our measures of family belonging, adolescents only reported about belonging to a parent’s neighborhood in case of contact with that parent. Phrasing of the items was adjusted depending on family structure, resulting in scores of Belonging to Family’s Neighborhood (α = .80), Belonging to Father’s Neighborhood (α = .89), Belonging to Mother’s Neighborhood (α = .91), a weighed score of Belonging to Divorced Family’s Neighborhood, and a merged score of Neighborhood Belonging for the total sample.

Adolescent Adjustment Measures
Problem Behavior. The Strength and Difficulties Questionnaire was used to measure adolescents’ self-reported Internalizing and Externalizing problems (Goodman, 1997). Participants were asked to evaluate statements regarding their behavior in the past 6 months, each with 3 response options (1 = not true, 2 = somewhat true, 3 = certainly true). Conform with Goodman and colleagues (2010), Internalizing problems were assessed by two scales: Emotional Symptoms and Peer Relationship Problems. Both scales consisted of 5 items, such as: “I worry a lot” (Emotional Symptoms) and “I get picked on or bullied by other children” (Peer Relationship Problems). Internal consistency of the total 10 items was acceptable (α = .68). Likewise, externalizing problems were assessed by two scales: Conduct Problems and Hyperactivity/Inattention. Both scales consisted of 5 items, such as: “I often have temper tantrums or hot tempers” (Conduct Problems) and “I am restless, overactive, and cannot stay still for long” (Hyperactivity/Inattention). Internal consistency of the total 10 items was acceptable (α = .73).

Wellbeing. The Cantril Scale (Cantril, 1967) was used as an indicator of wellbeing. Participants were presented with a visual scale numbered from 0 (bad) to 10 (good), and were asked to rate their wellbeing at the present time. Scores between 0 and 6 are considered low, 7 or 8 average, and 9 or 10 high (Mazur et al., 2018).

Control Variables
Interparental Conflict. Interparental Conflict was assessed with a subscale of the Coparenting Behavior Questionnaire (CBQ; Schum & Stolberg, 2007), consisting of
10 items on the amount of overt hostility between parents. Participants were asked to assess the frequency of certain interactions on a Likert scale ranging from 1 (*almost never*) to 5 (*almost always*). Exemplary items are “My parents argue with each other” and “My parents get along well” (reverse coded). Internal consistency was good (α = .90).

**Parent-Child Relationship Quality.** Parent-Child Relationship Quality was assessed for mothers and fathers separately, using a composite score of Parental Warmth and Parent-Child Communication. The Parental Warmth scale consisted of 7 items, such as “My mother/father enjoys spending time with me”, and has good internal consistency for mothers (α = .84) and fathers (α = .88). The Parent-Child Communication scale consisted of 6 items, such as “I talk to my mother/father about my problems”, and also has good internal consistency for mothers (α = .78) and fathers (α = .85). Scores on parental warmth and parent-child communication were highly correlated for both mothers (r = .74, p < .01) and fathers (r = .80, p < .01), therefore the scores on the two subscales were combined into average scores, indicative of the mother-child and father-child relationship quality.

**Statistical Analyses**

**Missing Data.** All variables had missing data. As expected, there were missing values on divorced family belonging (12.0% for mothers, 17.8% for fathers) and neighborhood belonging (12.6% for mothers, 21.5% for fathers), as adolescents were instructed to solely report on these items in case of contact with that parent. With the exception of wellbeing (7.4% missing), family belonging (4.1%) and neighborhood belonging (4.0%), missing values across the remaining measures ranged from 0.5% to 2.3%. Although Little’s (1988) missing completely at random test was significant, $\chi^2 (142) = 183.37, p = .011$, the normed chi-square ($\chi^2/df$) of 1.29 showed a good fit between the imputed and non-imputed sample scores, suggesting the pattern of missing data values was completely random (Bollen, 1989). As such, incomplete data were assumed to be random, and imputed using the Multiple Imputation Regression Method in IBM SPSS Statistics before conducting analyses in SPSS. For analyses conducted in Mplus, missing values were accounted for by means of full information maximum likelihood estimations (FIML; Muthén & Muthén, 1998-2017).

**Strategy of Analyses.** To address RQ.1 and examine family structure differences in adolescents’ sense of belonging, we conducted multivariate analyses of (co)variance. To address RQ.2 and examine differences in belonging between divorced paternal and maternal households, we performed correlations and paired samples t-tests. For RQ.3, we conducted four regression analyses in Mplus 8.2, in
order to test main (RQ.3a) and interaction effects (RQ.3b) of sense of belonging on adolescent adjustment outcomes. Interparental conflict, mother-child relationship quality, and father-child relationship quality were included in the model as covariates, as well as correlations between predictor variables. To explore invariance of relationships across family structure, we used multigroup models to compare models in which specific parameters were allowed to differ between the two groups, to a model in which these parameters were constrained. Wald Tests of Parameter Constraints were used to evaluate the significance of the difference in parameters across groups. Finally, to address RQ.4, and examine the extent to which adolescents’ sense of belonging mediates the effects of family structure (dummy coded: 0 = intact, 1 = divorced family) on adolescent adjustment, statistical significance of the indirect effect was tested using bootstrapping procedures. Unstandardized effects were computed for each of 1,000 bootstrap samples, and the 95% confidence interval was computed by determining the indirect effects at the 2.5th and 97.5th percentiles.

RESULTS

**Descriptive Statistics**

In Table 1, the correlations and descriptive statistics of the study variables are presented separately for adolescents from intact and divorced families, based on the pooled imputed data. Significant correlations varied from small to moderate. For both groups, all measures of belonging were significantly and positively correlated with each other, and with adolescent wellbeing, while they were negatively correlated with adolescent internalizing and externalizing problems. Only the association between divorced neighborhood belonging and externalizing behavior was nonsignificant. In intact families, all control variables, that is, interparental conflict, mother-child relationship quality, and father-child relationship quality, were significantly correlated with each other, as well as with belonging and adolescent adjustment measures. In divorced families, this was not the case, as interparental conflict was not associated with mother-child relationship quality, peer belonging, neighborhood belonging, and adolescent externalizing behavior. Additionally, no significant associations were found between mother-child relationship quality and externalizing behavior, nor between father-child relationship quality and peer belonging.

**RQ.1: Family Structure Differences in Adolescents’ Sense of Belonging**

Mean level differences between the sense of belonging of adolescents from intact and divorced families were examined using multivariate analyses of (co)variance. Tests were conducted on the pooled imputed data. For comparison, analyses were also performed on the subset of complete cases, and similar results were obtained.
Table 1

Correlations and Descriptive Statistics by Family Structure (N = 969)

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<td>- .23**</td>
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*p < .05, **p < .001. Notes: Statistics for adolescents from intact families are shown above the diagonal (N = 778), those for adolescents from divorced families below the diagonal (N = 191). For adolescents from divorced families, weighted measures of family and neighborhood belonging are used. Variable means that do not share the same superscript across groups differ at p < .05, as indicated by analyses of variance. Abbreviations: RQ = Relationship Quality.
Both MANOVA and MANCOVA results were statistically significant, $F_{\text{MANOVA}}(4, 966) = 15.16, p < .001$, partial $\eta^2 = .059$, and $F_{\text{MANCOVA}}(4, 963) = 14.05, p < .001$, partial $\eta^2 = .055$, which indicates the presence of meaningful family structure differences in adolescents’ sense of belonging, even after accounting for control variables. Univariate MANOVA results show that adolescents from divorced families reported lower levels of family belonging ($F(1, 969) = 9.03, p = .003$), and school belonging ($F(1, 969) = 6.69, p = .010$), yet higher levels of neighborhood belonging ($F(1, 969) = 27.62, p < .001$), than those from intact families. No significant differences were found for peer belonging ($F(1, 969) = .42, p = .516$). After controlling for interparental conflict, and adolescents’ relationship quality with mothers and fathers, differences in family belonging ($F(1, 966) = 11.82, p = .001$), and neighborhood belonging ($F(1, 966) = 51.22 p < .001$) remained, but differences in school belonging did not ($F(1, 966) = .01, p = .924$). Instead, a small but significant difference in peer belonging appeared ($F(1, 966) = 4.90, p = .027$), with adolescents from divorced families reporting higher levels of peer belonging ($M = 4.10, SD = .04$) than their peers from intact families ($M = 4.00, SD = .02$). The observed increase in peer belonging is likely to be a suppressor effect, meaning that the addition of control variables increases the predictive power of family structure. In sum, our findings show that adolescents from divorced families report lower levels of family belonging, and higher levels of neighborhood belonging than youth from intact families, even when controlling for several family processes.

**Table 2**

| Correlations and Descriptive Statistics in Divorced Families |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                  | 1                | 2                | 3                | 4                | 5                | 6                | 7                | 8                |
| 1. Paternal FB   |                  |                  |                  |                  |                  |                  |                  |                  |
| 2. Maternal FB   | .19*             |                  |                  |                  |                  |                  |                  |                  |
| 3. Paternal NB   | .47** .15       |                  |                  |                  |                  |                  |                  |                  |
| 4. Maternal NB   | .10 .41** .01   |                  |                  |                  |                  |                  |                  |                  |
| 5. Father-child RQ | .67** .12 .38** .22** |                  |                  |                  |                  |                  |                  |                  |
| 6. Mother-child RQ | .13 .71** .14 .45** .26** |                  |                  |                  |                  |                  |                  |                  |
| 7. Parental conflict | -.45** -.24** -.21** -.03 -.39** -.13 |                  |                  |                  |                  |                  |                  |                  |
| 8. Time w/ father | .23** -.16* .26** -.27** .36** -.26** -.10 |                  |                  |                  |                  |                  |                  |                  |

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<td>.85</td>
<td>6.23</td>
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*p < .05, **p < .01. Notes. Non-weighted measures of family and neighborhood belonging were used. Time w/ father, the amount of time spent in the paternal home ranged from 0 to 28, and is based on the number of days and nights adolescents on average spent at their fathers homes, according to the their reports on the Residential Calendar (Sodermans et al., 2014). Cases were excluded pairwise. Abbreviations: FB = Family belonging; NB = Neighborhood belonging; RQ = Relationship quality.
RQ.2: Family and Neighborhood Belonging in Divorced Families
As adolescents from divorced families reported on their sense of family and neighborhood belonging to each parental home separately, correlations within and differences between parental homes were examined (Table 2). Adolescents’ belonging to father’s family correlated positively and moderately with belonging to father’s neighborhood, strongly with father-child relationship quality, and weakly but significantly with the amount of contact with father. Similarly, adolescents’ reported belonging to mother’s family correlated positively and moderately with belonging to mother’s neighborhood, strongly with mother-child relationship quality, and weakly but significantly with the amount of contact with father. Interparental conflict was negatively associated with family belonging (stronger for fathers), belonging to father’s neighborhood, and the father-child relationship quality. There was no significant association with father-child contact frequency. Furthermore, small to moderate correlations were found between belonging to father’s and mother’s family, belonging to father’s and mother’s neighborhood, and father- and mother-child relationship quality. Finally, paired samples t-test indicated significant differences between parental homes, with adolescents reporting more family belonging ($t(149) = 4.26, p < .001$), more neighborhood belonging ($t(144) = 7.66, p < .001$), and a higher parent-child relationship quality ($t(190) = 12.69, p < .001$) with regard to their mothers, than to their fathers.

RQ.3: Sense of Belonging and Adolescent Adjustment
To understand the role of sense of belonging on adolescent adjustment outcomes, a series of multiple regressions were conducted. To answer RQ.3a, we tested main effects of belonging on adolescent adjustment outcomes in a constrained model. Examination of model fit indices revealed that the fit could be improved by including correlations between family belonging and all control variables, resulting in a model with good fit as indicated by $\chi^2 (30) = 33.706$, Root Mean Square Error of Approximation (RMSEA) = .016, and Comparative Fit Index (CFI) = .996. Wald tests for models in which specific parameters were allowed to differ across family structure were nonsignificant, meaning that there were no statistically significant differences between adolescents from intact and divorced families regarding the predictive strength of adolescents’ perceptions of family, school, peer, and neighborhood belonging on their self-reported well-being (Wald = 4.05, $p = .550$), internalizing problems (Wald = 1.48, $p = .830$), and externalizing problems (Wald = 1.89, $p = .757$). The results of the constrained model are therefore presented in Table 3. Within the total sample of adolescents, perceptions of family, school, and peer belonging in combination accounted for a significant proportion of the variability in each of the self-reported adjustment outcomes. More specifically, family, school and peer belonging predicted 35%/31% of the variability in
wellbeing. Family, peer and neighborhood belonging predicted 34/29% of the variability in adolescents internalizing problem behavior, and family and school belonging predicted 19%/17% of the variability in their externalizing problem behavior.

Table 3

Regression Results for Belonging on Adolescent Adjustment (N = 969)

<table>
<thead>
<tr>
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<td><strong>Model 1. Wellbeing</strong></td>
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<tr>
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<td>.09</td>
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<td>.35**/31**</td>
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<tr>
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<td>.03</td>
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<tr>
<td>Relationship Mother</td>
<td>-.27</td>
<td>.08</td>
<td>.13**</td>
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<tr>
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<td>.09</td>
<td>.33**</td>
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<tr>
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<tr>
<td>Peer Belonging</td>
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<td>.09</td>
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<tr>
<td>Neighborhood Belonging</td>
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<td><strong>Model 2. Internalizing</strong></td>
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<td>.34**/.29**</td>
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<tr>
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<td>.02</td>
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<tr>
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<td>.92</td>
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<td>Relationship with Mother</td>
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<tr>
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<tr>
<td><strong>Model 3. Externalizing</strong></td>
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<td>.01</td>
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<td>Relationship with Father</td>
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<td>Neighborhood Belonging</td>
<td>-.02</td>
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*p ≤ .05, **p ≤ .001. Note. Interparental conflict, relationship with father, and relationship with mother were included in all models as covariates.

For RQ.3b, the same procedure as for RQ3.a was used to examine interaction effects of sense of belonging on adolescent adjustment, by adding interaction terms to the previous model. This resulted in the addition of six two-way interaction terms per dependent variable (e.g., family*school belonging), as well as correlations between

56
interaction variables. Model fit was good, as indicated by $\chi^2 (63) = 88.394$, RMSEA = .029, and CFI = .972. Only two out of 18 interaction effects resulted in $p$-values below .05: school*peer belonging ($p = .001$), and school*neighborhood belonging ($p = .030$) on internalizing problems. Given the increased chance of a type I error when simultaneously testing multiple hypotheses, in addition to the lack of increase in the proportion of explain variance ($\Delta R^2 < .022$), we regard these outcomes as negligible and conclude that besides main effects, there are no consistent significant interaction effects of belonging to certain social contexts on adolescent adjustment.

**RQ.4: Belonging as a Mediator**

To further investigate the role of sense of belonging in adolescent adjustment outcomes, we examined mediational pathways from family structure to adolescents’ sense of belonging, to adolescent adjustment outcomes, controlling for interparental conflict, and relationship quality with fathers and mothers. As Figure 1 illustrates, the relationship between family structure and wellbeing was partly mediated by adolescents’ sense of belonging ($\beta = -.04, p = .028$). As for adolescent problem behavior, we found a nonsignificant indirect effect on internalizing problems (see Figure 2, $\beta = .01, p = .549$), but a significant indirect effect on externalizing problems (see Figure 3, $\beta = .04, p = .037$). The results of our mediation analyses thus show that the differences in wellbeing and externalizing behavior between adolescents from intact and divorced families are partly mediated by adolescents’ sense of belonging.

**Figure 1**

*Standardized Parameter Estimates for the Relation Between Family Structure and Wellbeing as Mediated by Sense of Belonging*

![Diagram]

*Notes. Family structure is dummy coded (0 = intact family, 1 = divorced family). Effects on wellbeing are controlled for interparental conflict ($\beta = -.13, p = .002$), father-child relationship quality ($\beta = .04, p = .397$), and mother-child relationship quality ($\beta = -.10, p = .004$).*
**Figure 2**  
*Standardized Parameter Estimates for the Relation Between Family Structure and Internalizing Problems as Mediated by Sense of Belonging*

* *p ≤ .05, **p ≤ .001. Notes: Family structure is dummy coded (0 = intact family, 1 = divorced family). Effects on internalizing problems are controlled for interparental conflict (β = .07, p = .036), father-child relationship quality (β = -.04, p = .410), and mother-child relationship quality (β = .13, p = .001).*

**Figure 3**  
*Standardized Parameter Estimates for the Relation Between Family Structure and Externalizing Problems as Mediated by Sense of Belonging*

* *p ≤ .05, **p ≤ .001. Notes: Family structure is dummy coded (0 = intact family, 1 = divorced family). Effects on externalizing problems are controlled for interparental conflict (β = .02, p = .576), father-child relationship quality (β = -.01, p = .721), and mother-child relationship quality (β = .09, p = .032).*
DISCUSSION

Adolescents’ sense of belonging to their social context is essential for their positive adjustment. When they grow up in divorced families, it may be particularly challenging to fulfill this need, as a parental divorce is typically accompanied by a range of transitions in both the family system and their direct social environment. Continuing the work of past studies (e.g., Jose et al., 2012; Witherspoon et al., 2009), the present study adopted an ecological perspective and examined adolescents’ sense of belonging to multiple contexts. Possible differences were examined between the sense of belonging to family, peer group, school and neighborhood of adolescents from intact versus divorced families, and how this relates to their adjustment.

Our results confirm that mean levels in perceived belonging exist based on family structure. In line with theoretical expectations and previous research (e.g., King et al., 2018), adolescents from divorced families reported lower levels of belonging to the family system than those from intact families. We expected that they would also report lower levels of belonging to other social contexts, as a result of the potential series of changes and disruptions in their life (Amato, 2010). However, although adolescents from divorced families indeed reported lower levels of school belonging than their peers from intact families, these differences could be accounted for by the higher degree of interparental conflict, and relatively lower parent-child relationship quality in divorced families. Previous research has shown that adolescents are more likely to identify themselves with schools when they experience parental support (Wang & Eccles, 2012). We did not find meaningful differences in adolescents’ perceptions of peer belonging, so it appears that living in a divorced family does not prevent them from forming or maintaining close friendships. It may be that online communication tools (Grieve et al., 2013; Shapiro & Margolin, 2014) nowadays provide them with enough opportunities to engage with peers, even in situations of increased physical distance. Against expectations, adolescents from divorced families experienced a stronger sense of overall neighborhood belonging than adolescents from intact families.

What clearly emerged from our results were the differences in adolescents’ evaluation of maternal and paternal households in terms of neighborhood belonging, as well as family belonging. Previous studies, have shown that the quality of parent-child relationships is strongly related to contact frequency, and that adolescents after divorce typically spend more time at their mothers’ homes (Beckmeyer et al., 2019; Holt, 2016; Poortman & van Gaalen, 2017). Moreover, higher levels of interparental conflict generally have more negative consequences for the amount of contact with fathers (Elam et al., 2016; Kalmijn, 2016). Our results
are in line with these findings. Although the relation between interparental conflict and contact frequency with fathers was nonsignificant, contact frequency was associated more strongly with father-child relationship quality than with mother-child relationship quality. In addition to a higher quality relationship with mothers than fathers, adolescents also report a higher sense of belonging to mothers’ homes and neighborhoods.

Our findings showed that the relations of belonging to multiple contexts on adolescents’ adjustment did not differ for adolescents from intact versus divorced families. Despite a generally higher risk on psychosocial problems, and generally lower levels of belonging, belonging seems to relate to adjustment in similar ways in both groups. In line with previous studies, perceptions of family, school, peer, and neighborhood belonging in combination accounted for significant differences in adolescents’ wellbeing and problem behavior, after controlling for interparental conflict, and relationship quality with mothers and fathers. The relative sizes of these relations indicate that family belonging had the greatest association with wellbeing, while peer belonging was most strongly associated with internalizing behavior, and school belonging with externalizing behavior. Previous studies suggested that family and school, in relation to other social contexts, had the strongest, and comparable associations with adjustment outcomes (Jose et al., 2012; Law et al., 2013). It is possible that in these studies, peer and school belonging overlap if adolescents report about their relationships with peers at school. Furthermore, we did not find interaction effects between belonging to social contexts on adolescent adjustment. It could be that the interweaving nature of multiple contexts of belonging requires a person-centered approach instead of the variable-centered approach that we used. A person-centered approach could reveal certain patterns in belonging to the various contexts. Witherspoon and colleagues (2009) have indeed used such an approach, and identified profiles of connectedness to distinguish between groups of youth with relatively low or high belonging. These profiles were significantly associated with adolescent adjustment.

Our final aim was to examine mediational effects of sense of belonging in the relation between family structure and adolescent adjustment. We found small but significant indirect effects of belonging on wellbeing and externalizing problems, but not on internalizing problems. This means that for adolescents after divorce, a reduced sense of belonging to various contexts partly explains negative adjustment, even after controlling for interparental conflict, and relationship quality with mothers and fathers.
Limitations and Suggestions for Future Research
Although the current study showed clear relationships between adolescents’ sense of belonging to multiple contexts and several adjustment outcomes, causality should not be inferred due to the cross-sectional nature of our study. Although parental divorce preceded our assessment of belonging and adolescent adjustment, we did use mediation analysis on cross-sectional data, meaning that it is also possible that adolescents’ adjustment affects their sense of belonging or that the relationship is bidirectional. In addition, we cannot make any inferences about the stability or development of belonging over time. Future research could choose to adopt a longitudinal approach and follow divorced families over time, in order to study associations between divorce related transitions and social connectedness more dynamically. Identifying factors that predict family, school, peer, and neighborhood belonging, and focusing on differences within instead of between groups, could be a next step towards understanding adolescents’ post-divorce belongingness.

Another limitation is that our research relied solely on adolescent self-report data. Using other informants, especially parents, would be helpful in substantiating the robustness of the findings with self-report measures, but perhaps even more in examining potential discrepancies between parent and adolescent reports. Parents after divorce may not be aware of their children’s diminished perceptions of belonging to the family or school context, while they play an important role in increasing their belongingness. An additional limitation is our use of questionnaire data only. Qualitative data would be useful in further investigating interrelatedness between multiple contexts. This could provide insight into whether particular contexts are more important to some adolescents than to others, and to what extent adolescents experience belonging as a motivation for their interpersonal behavior themselves.

Conclusion
Taken together, our findings make a meaningful contribution to the existing literature, in the sense that they advance our understanding of the role of sense of belonging in adolescent adjustment, particularly for youth from divorced families. Although relations between belonging and adjustment do not differ based on family structure, mean level differences do exist, and partly explain why adolescents after divorce on average have a higher risk of reduced wellbeing and increased problem behavior. Improving adolescents’ sense of belonging could therefore be an important step in ensuring a better adjustment for adolescents after parental divorce. Moreover, the implication of this study is widely applicable. Parents and youth and family professionals in the clinical field may choose to focus on
strengthening adolescents’ belongingness to parental, or specifically paternal homes, for example through encouraging shared activities (King & Boyd, 2016). Schools can play a role in fostering school belonging, for example through encouraging teachers to be caring and empathic, and help students resolve personal problems in addition to academic problems (Allen et al., 2018). Youth themselves may be encouraged to strengthen their sense of belonging by engaging in sports, hobbies, or other leisure time activities (Berg et al., 2015). That is, a sense of belonging is a multidimensional construct, that can be derived from multiple contexts.
CHAPTER 4
Post-Divorce Coparenting Patterns and Relations with Adolescent Adjustment
ABSTRACT

This study examined the association between post-divorce coparenting patterns and adolescent internalizing and externalizing behavior. Youth after parental divorce increasingly grow up in shared residence arrangements, making post-divorce coparenting much more pertinent. The Coparenting Behavior Questionnaire was used to investigate the perceptions of 251 adolescents (Mage = 13.4; 50.6% girls) regarding post-divorce coparenting behaviors. Latent class analysis was used to identify coparenting patterns, and associations with adolescent outcomes were examined. Four distinct post-divorce coparenting patterns were identified: cooperative, negatively engaged, negatively disengaged, and average. Adolescents of parents with a cooperative pattern reported the least amount of internalizing and externalizing problems, whereas adolescents with negatively engaged parents reported the most internalizing problems. In line with family systems theory, interactions in the coparental subsystem are associated with adolescent adjustment and can therefore be viewed as both a risk and a protective factor.

Keywords
Divorce/separation, coparenting, internalizing problems, externalizing problems, adolescents

Reference

Author Contributions
ZR and IvdV conceptualized the study. IvdV was responsible for the collection of data. ZR analyzed the data together with SB. ZR wrote the manuscript and all authors provided feedback on the manuscript.
INTRODUCTION

Annually, a considerable number of children in the Western world face the divorce or separation of their parents. Empirical studies have consistently shown that this is a risk factor for their short- and long-term adjustment (e.g., Lansford, 2009). On average, children after divorce experience more emotional, behavioral, social, and academic problems compared to their peers from intact families (Amato, 2010; Kelly & Emery, 2003). The seriousness of these consequences varies enormously, and not the divorce itself, but factors accompanying it, are responsible for most of its negative effects (e.g., Amato, 2010). In order to understand children’s post-divorce adjustment, it is essential to understand the larger family system they grow up in, and therefore to consider the mutual influences among family subsystems (Family Systems Theory, Cox & Paley, 1997; 2003; Minuchin, 1985). Two important dyadic factors in this respect are the child’s relationship with both parents, and the quality of the interparental relationship (Fabricius & Lueck, 2007; Lamb, 2018; Weaver & Schofield, 2015). Both factors relate to, and shape, an important aspect of family functioning: Coparenting.

Previous studies have shown that coparenting affects child well-being above and beyond parenting (Buehler, 2020; Murphy et al., 2017; Teubert & Pinquart, 2010). Coparenting can be defined as the collaboration in childrearing of two parental figures who share the responsibilities for at least one child (Feinberg, 2003). Ideally, parents not only ‘share parenthood’, but also actively try to support each other’s parenting while maintaining healthy but flexible boundaries (Adamsons & Pasley, 2006). Not all parents are able to show effective coparenting, however, and ineffective coparenting might have negative consequences for adolescent wellbeing. Especially when parents are divorced and share their parenting responsibilities in different households, coparenting is important to provide the child with consistency and a certain amount of mutual consent, but might be challenging for parents as they might have different interests. Nowadays, an increasing number of children and adolescents has regular contact with both parents after divorce (Poortman & van Gaalen, 2017; Steinbach, Augustijn, & Corkadi, 2020), making it more pertinent how parents shape their joint parenthood. Particularly during adolescence, when the parent-child relationship is reorganizing and parents need to balance supportive parenting with autonomy granting, effective coparenting might be crucial for adolescents’ development. This study focuses on coparenting after divorce and relations with adolescent adjustment.
Post-divorce Coparenting Dimensions

Four key post-divorce coparenting dimensions commonly distinguished in the literature are coparental communication, respect and cooperation, conflict, and triangulation (e.g., Mullett & Stolberg, 1999; McConnell & Kerig, 2002; Macie & Stolberg, 2003). The communication dimension refers to the exchange of information between parents about child-rearing issues, and the interaction patterns that emerge as one parent supports or undermines the parenting attempts of the other parent (Schrodt & Shimkowski, 2013). Coparental cooperation and respect requires parents to put their own differences aside in the interests of their child, and to promote a positive relationship between the child and the other parent (Feinberg, 2003). Putting their child first helps divorced parents relate to each other, and to focus their conversations on their children (Markham et al., 2017). Both coparental communication and respect are associated with adolescent self-esteem, internalizing and externalizing problems (Beckmeyer, Coleman, & Ganong, 2014; Gasper et al., 2008).

A third dimension entails coparental conflict. Conflicts between parents about childrearing can cause a disturbance in their parenting skills, and compromise positive parenting behaviors (Elam et al., 2019). Moreover, negativity between parents can lead to negativity within the entire family system, a so-called spillover effect (Erel & Burman, 1995). High levels of interparental conflict are associated with negative outcomes for children and adolescents, such as internalizing and externalizing behavior (Van Dijk et al., 2020). The fourth dimension, triangulation, refers to the involvement of children in parental conflicts. When parents try to form alliances with a child against the other parent, or when the boundaries between the parental and parent-child subsystems become unclear, children are likely to serve as ‘allies’ or ‘pawns’ in their parents’ conflicts (Buchanan, Maccoby, & Dornbusch, 1991; Minuchin, 1985). Triangulation, or feeling caught between parents, has been studied to a lesser extent than the other coparenting dimensions, but has been linked to higher levels of negative affect (Schwarz, 2009; Shimkowski & Schrodt, 2012).

Although individual coparenting dimensions have been linked to child and adolescent wellbeing, it is clear that parents’ behaviors do not stand on their own. Positive dimensions such as communication and cooperation are interrelated, just like negative dimensions such as conflict and triangulation, but do not necessarily have to occur together. Parents after divorce can show different combinations of these four dimensions of coparenting. Moreover, it is the interplay between different dimensions rather than a single dimension of coparenting that determines post-divorce family functioning. In line with this notion, researchers have started
to use person-oriented instead of variable-centered approaches. Rather than focusing on the association between a specific variable and an outcome, a person-centered approach allows to empirically identify distinct patterns among multiple variables, and to test associations of those patterns with outcome variables. Taking this approach provides a more holistic picture of post-divorce coparenting, since it focuses on the combined way in which parents use several aspects of coparenting.

**Post-divorce Coparenting Patterns and Adolescent Adjustment**

Even with the use of different conceptualizations of coparenting, different samples from different countries, different research methods, and different types of analyses, previous studies have identified similar post-divorce coparenting patterns or typologies. Two commonly distinguished patterns are the *cooperative* and the *high-conflict* pattern (Ahrons, 1994; Amato, Kane & James, 2011; Beckmeyer et al., 2014; Beckmeyer, Markham, & Troilo, 2019; Lamela, Figueiredo, Bastos, & Feinberg, 2016; Maccoby, Depner, & Mnookin, 1990). The cooperative pattern is characterized by high levels of coparental communication, interaction, cooperation, and little conflict. Parents showing this coparenting style are able to isolate potential interpersonal conflicts from their role as parents, facilitating communication and coordination between the two households. By contrast, the high-conflict coparenting pattern involves high levels of conflict, in combination with infrequent communication. Parents in this group continue their conflicts after divorce, allowing the negativity to spill over into the parenting domain. Some studies have also identified a pattern in which parents have stopped communicating, have little or no conflicts, make few attempts to coordinate parenting, and thus act as single parents; a *disengaged* pattern, which refers to a more parallel way of parenting (Amato et al., 2011; Maccoby et al., 1990). Last, some *mixed* coparenting patterns were found, in which parents communicate and coordinate frequently, but at the same time maintain high degrees of conflict (Beckmeyer et al., 2014; Beckmeyer et al., 2019; Maccoby et al., 1990).

The fact that several studies have found similar post-divorce coparenting patterns based on data collected between 1984 and 2016 among divorced and separated mothers and fathers with children between 3 and 19 years old, speaks for the reliability and generalizability of their findings. Nevertheless, researchers have noted that children may perceive coparenting relationships differently than parents (e.g., Beckmeyer et al., 2019). Co-parents may not agree on how they assess their coparental relationship, and parents may overestimate their own coparenting skills. Therefore, the current study examined whether these coparenting patterns can be replicated using adolescents’ perspectives.
Furthermore, empirical findings on the association between post-divorce coparenting patterns and child and adolescent adjustment are inconsistent. Theoretically, constructive coparenting patterns can serve as a protective factor for adolescent adjustment. Yet, one study found that children’s internalizing and externalizing behaviors did not differ significantly by type of post-divorce coparenting relationship (Beckmeyer et al., 2014). Another showed that children in the cooperative coparenting group had the smallest number of behavior problems, but did not score significantly better than other children on ten additional outcomes (Amato et al., 2011), and yet another study found that cooperative co-parents reported lower internalizing and externalizing problems in their children than parents with other coparenting styles (Lamela et al., 2016). Taken together, there is inconsistent empirical support for positive, cooperative post-divorce coparenting as a protective factor for youth adjustment, and no direct support for negative, high-conflict post-divorce coparenting as a risk factor. However, since there are indications that higher levels of shared parenting are associated with poorer child adjustment in cases of high conflict following divorce (Mahrer, O’Hara, Sandler, & Wolchick, 2018), the possibility of negative coparenting as perceived by adolescents as a risk factor for adolescent adjustment cannot be ruled out.

The Current Study
The aim of the current study was twofold. First, we aimed to replicate the findings of previous studies on post-divorce coparenting patterns, using adolescent instead of parent reports. To our knowledge, this was the first study that focused on the perceptions of adolescents in this context. Our second aim was to explore the associations between adolescent-reported post-divorce coparenting patterns and self-reported internalizing and externalizing problem behavior, in order to advance our understanding of coparenting after divorce.

METHODS

Procedure
Data used in this study were collected within the cross-sequential research project “Students & Families” [Scholieren & Gezinnen]. Since 2006, this research has been conducted every two years among different cohorts of Dutch students. As coparenting variables were measured only in Wave 2016, and only in adolescents from divorced families, these data were used for the present study. Using self-report questionnaires, quantitative data were collected at various Dutch schools throughout the Netherlands. The questionnaires were introduced and administered during school hours by students from Utrecht University. The participants completed the questionnaires individually, anonymously, and
voluntarily after informed consent from the school, parents, and participants themselves.

**Sample**
A total of 1227 adolescents from intact, divorced, and widowed families from 18 different schools completed the questionnaire. After selecting adolescents from divorced families, the final study sample consisted of 251 adolescents, of which 124 boys (49.4%) and 127 girls (50.6%) aged 11 to 17, with an average age of 13.4 years (SD = 1.09). 8.5% of the participants were in primary school, and the rest were in high school, with the level of education varying from low (49.6%), medium (18.3%) to high (23.6%). Of these adolescents, 163 came from formally divorced families and 88 from formerly cohabiting, now separated families. Respondents' age at time of their parents’ divorce ranged from 0 to 16, with an average age of 6.3 years (SD = 3.79). Respondents were asked to indicate how much time they typically spent with their father and mother, ranging from 1 (*no days/night a week*) to 8 (*7 days/night a week*). Based on these scores, 24% of the adolescents reported living solely with their mothers, 41% living mostly with their mothers, 26% living with both parents an equal amount of time, and 9% living mostly or solely with their fathers.

**Measures**
**Coparenting.** Post-divorce coparenting was measured with the Dutch translation of the *Coparenting Behavior Questionnaire* (CBQ; Schum & Stolberg, 2007). This questionnaire measures adolescents’ perceptions of divorced parents’ coparenting interactions and parenting behavior, independent of residence arrangements. The four subscales measure parental respect, parental communication, parental conflict, and triangulation. Participants assessed the frequency of certain interactions on a Likert scale ranging from 1 (*almost never*) to 5 (*almost always*).

The Coparental Respect/Cooperation scale consists of 8 items on parents’ mutual respect, for example: “My mom wants me to be close to dad”, and “My dad says good things about my mom”. The Coparental Communication scale consists of 6 items on the content and frequency of parents’ communication, such as “My parents talk to each other about important choices in my life.”, and “My parents talk to each other about how I feel about their divorce”. The Coparental Conflict scale consists of 10 items on the amount of overt hostility between parents, among which: “My parents argue with each other”, and “My parents get along well”. Lastly, the Triangulation scale consists of 12 items assessing adolescents’ feelings of being caught in-between their parents, such as: “My dad asks questions about my mom”, and “It’s okay to talk about mom in front of dad”. Internal consistencies of the scales ranged
from $\alpha = .80$ to $\alpha = .91$. For each dimension, the mean score on the combined items was used, with higher scores reflecting a higher level of each dimension.

**Internalizing behavior.** Internalizing problem behavior was measured by a combined score of depression and anxiety. Depression was measured with a shortened version of the Children’s Depression Inventory (CDI; Craighead, Smucker, Craighead, & Ilardi, 1998). Participants evaluated 10 statements on a Likert scale ranging from 1 (*not at all true*) to 5 (*very true*). Exemplary items are: “I often feel sad” and “I blame myself often”. The reliability of this scale was considered good ($\alpha = .90$). For both the depression and the anxiety scale, scores on the items were averaged. Scores on depression and anxiety were highly correlated ($r = .78$). The scores on the two subscales were therefore combined in an average score of internalizing behavior.

**Externalizing behavior.** Externalizing problem behavior was measured by a combined score of aggression and delinquency. Aggression was measured with a shortened version of the Direct and Indirect Aggression Scales (DIAS; Björkvist, Lagerspetz, & Osterman, 1992). Participants evaluated 11 statements on a Likert scale ranging from 1 (*never*) to 5 (*very often*). Exemplary items are: “I make fun of others” and “I hit and kick others”. The reliability of this scale was considered good ($\alpha = .84$).

Delinquency was measured with the shortened version of the Delinquency Self-report Questionnaire, [Delinquentie Zelfrapportagellijst] (Baerveldt, Rossem, & Vermande, 2003). On a scale ranging from 1 (*never*) to 4 (*4 times or more*), participants indicated how often they had committed 15 different delinquent acts in the past 12 months, like: “I stole a bike” or “I started a fire”. The reliability of this scale was considered good ($\alpha = .86$). For both the aggression and the delinquency scale, scores on the items were averaged. Scores on aggression and delinquency were moderately correlated ($r = .52$). The scores on the two subscales were therefore combined in an average score of externalizing behavior.
**Strategy of Analyses**

To examine whether different post-divorce coparenting patterns could be identified in our sample, we used Latent Class Analysis in Mplus 8.2 (Muthén & Muthén, 1998-2017). Main variables in this dataset contained limited missing data (1 or 2 cases per variable), and Little’s missing completely at random test showed that these data were missing at random, $\chi^2 (13) = 16.65, p = .216$. In the Latent Class Analysis, missing data were handled in Mplus with full information maximum likelihood (FIML; Muthén & Muthén, 1998-2017). To explore the number of classes that would best fit the data, two-, three-, four, and five-class models were investigated using the following criteria (Nylund, Asparouhov, & Muthén, 2007). First, when adding an additional class, the Bayesian Information Criterion (BIC) should indicate improved model fit, by decreasing at least 10 points (Kass & Raftery, 1995). Second, entropy ($E$) was assessed, a standardized measure of classification of individuals into trajectory classes based upon the posterior probabilities of classification. Entropy values range from .00 to 1.00, and values of .70 or higher indicate good classification accuracy (Reinecke, 2006). Third, the bootstrapped likelihood ratio test (BLRT; McLachlan, 1987) was utilized to assess an increase of fit. Fourth, all classes had to cover at least 5% of the sample to be able to make meaningful comparisons. Fifth, we evaluated the theoretical interpretation of the classes in the several models. If an additional class in a solution with $k$ classes was found to be a slight variation of a class already found in a solution with $k - 1$ classes, we chose the most parsimonious solution. Next, we conducted a power analysis on the model, based on the RMSEA (MacCallum, Browne, & Sugawara, 1996), using a webpage by Preacher and Coffman (2006). This method provides power estimates that indicate the sensitivity of the model to detect model misspecification, based on the complexity of the model ($df$) and the sample size.

Next, several background characteristics were examined as predictors of the classes: Adolescent sex, age, age at time of divorce, contact frequency with mother and father, and presence of a stepmother and/or father. We used the 3-step method (R3STEP) in Mplus, meaning that these variables were specified as predictors to the model (step 3), after the latent classes were estimated (step 1), and most likely class membership was determined (step 2) (Asparouhov & Muthén, 2014a). This resulted in unstandardized ($b$) and standardized estimates (Odds Ratios) for every pairwise class comparison, with significant results suggesting that a variable significantly predicts the likelihood of belonging to class $A$ versus class $B$. Several background characteristics had missing values: Age at time of divorce (14.3%), contact frequency with mother (8.0%) and father (9.2%), and presence of a stepfather (6.0%) or stepmother (11.2%). Little’s missing completely at random test showed that data were missing at random, $\chi^2 (20) = 24.37, p = .227$. As Mplus
applies listwise deletion to auxiliary variables, incomplete data were imputed using multiple imputation before conducting the analysis.

To examine whether post-divorce coparenting patterns were associated with adolescent adjustment outcomes, we used the Mplus automatic BCH approach (Asparouhov & Muthén, 2014b). This approach has been recommended as the most preferable way to examine the associations between latent classes and outcome variables, as it takes into account classification uncertainty rather than assigning individuals to their most likely class. Finally, we performed a sensitivity analysis to find out whether the results would remain the same when including previously listed background characteristics, as well as maternal and paternal warmth as predictors of adolescent internalizing and externalizing behavior.

RESULTS

Correlations
First, correlations were used to examine the associations among coparenting dimensions and adolescent internalizing and externalizing problem behavior (Table 1). There were significant relations between all coparenting dimensions. As expected, coparental respect and coparental communication were positively and strongly correlated, \( r = .74, p < .01 \), as were coparental conflict and triangulation, \( r = .73, p < .01 \). Coparental respect and coparental communication were negatively and moderately correlated with coparental conflict and triangulation, with correlations ranging from \( r = -.46 \) to \( r = -.33, p < .01 \). Regarding adolescent outcomes, in line with expectations, coparental conflict (\( r = .37, p < .01 \)) and triangulation (\( r = .49, p < .01 \)) were significantly positively associated with internalizing behavior. Furthermore, a small but significant negative correlation was found between coparental respect and internalizing problems (\( r = -.15, p < .05 \)), but not between coparental communication and internalizing problems. In contrast to expectations, no significant associations were found between coparenting dimensions and externalizing behavior.

Post-divorce Coparenting Patterns: Latent Class Analysis
To select a typology of post-divorce coparenting patterns, models with two to five classes were compared. Table 2 presents an overview of the selection criteria for all solutions estimated. All solutions showed adequate entropy values, and BLRT values for each solution indicated an increase of fit. However, when comparing the four-class solution with the five-class solution, the drop in BIC was very minor (\( \Delta \text{BIC} = 1.38 \)). In addition, when evaluating the content of the five-class model, the fifth class turned out to be a slight variation of a class already found in the four-class solution. Thus, the four-class solution was found to be the most parsimonious.
Power of our model was tested based on two hypotheses. We tested the close-fit hypothesis, which means that for the Null RMSEA we used ≤ .05 and for the Alternative RMSEA .08. Power, in this case, indicates the estimated probability that we can reject a model if it does not fit closely to the population. The estimated power for the test of the close-fit hypothesis for our sample size was .753, indicating adequate power to reject a not closely fitting model. We also computed power using an Alternative RMSEA of .09, which indicates the sensitivity of the model to reject a poorly fitting model. Here, the estimated power was 0.935, indicating that the model is highly sensitive to rejecting poor fit.

Table 1

Post-divorce Coparenting Variables and Adolescent Outcomes: Correlations and Descriptive Statistics (N = 251)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Respect/cooperation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Communication</td>
<td>.74**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Conflict</td>
<td>-.46**</td>
<td>-.41**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Triangulation</td>
<td>-.34**</td>
<td>-.33**</td>
<td>.73**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Internalizing</td>
<td>-.15*</td>
<td>-.09</td>
<td>.37**</td>
<td>.49**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Externalizing</td>
<td>-.00</td>
<td>.04</td>
<td>.08</td>
<td>.06</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>2.80</td>
<td>3.05</td>
<td>2.09</td>
<td>1.87</td>
<td>2.39</td>
<td>1.41</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>.95</td>
<td>1.19</td>
<td>.88</td>
<td>.65</td>
<td>.79</td>
<td>.36</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01.

Table 2

Results of Latent Class Analyses (N = 251)

<table>
<thead>
<tr>
<th>Solution</th>
<th>BIC</th>
<th>Entropy</th>
<th>Class counts</th>
<th><strong>p</strong> value, BLRT test</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - class</td>
<td>2313.16</td>
<td>.86</td>
<td>143 108</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>3 - class</td>
<td>2246.98</td>
<td>.89</td>
<td>30 105 116</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>4 - <strong>class</strong></td>
<td>2203.85</td>
<td><strong>.85</strong></td>
<td>31 49 78 93</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>5 - class</td>
<td>2202.47</td>
<td>.85</td>
<td>31 43 64 92 21</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>

Notes. BIC = Bayesian Information criterion; BLRT = bootstrapped likelihood ratio test. The solution in bold was selected.
Figure 1 presents the four-class solution. The y-axis represents z scores. Mean scores and pairwise mean comparisons are presented in Table 3. The following labels were assigned to the four classes: A cooperative (31%), negatively engaged (20%), negatively disengaged (12%), and an average post-divorce coparenting pattern (37%). The cooperative pattern is characterized by relatively high levels of respect and communication, combined with the lowest levels of conflict and triangulation. By contrast, the negatively engaged pattern is characterized by the highest levels of conflict and triangulation, combined with average to high levels of respect and communication. In the negatively disengaged pattern, levels of respect and communication were lowest, combined with average to high amounts of conflict and triangulation. Finally, within the average pattern, levels of respect and communication were comparable with those in the cooperative and negatively engaged pattern, combined with average amounts of conflict and triangulation (i.e., lower than the negatively engaged pattern, higher than the cooperative pattern).

Figure 1
Identified Post-divorce Coparenting Patterns

![Bar chart showing z-scores for coparental respect, communication, conflict, and triangulation.]

Note. Z-scores for coparental respect, communication, conflict, and triangulation.

Next, we examined potential predictors of the latent coparenting patterns: Adolescent sex, age, age at time of divorce, contact frequency with mother and father, and presence of a stepmother and/or father. No significant results were found with regard to adolescent age, contact frequency with parents, and presence
of a stepparent. This means that overall, these variables do not appear to be substantial predictors of adolescents’ membership to each of the four latent post-divorce coparenting patterns. We did find several significant results for adolescent sex and age at time of the divorce. That is, girls were more likely than boys to ‘belong to’ the negatively engaged pattern compared to the other patterns: The average pattern \( B = 1.127, p = .018, OR = 3.086 \), negatively disengaged pattern \( B = 1.367, p = .031, OR = 3.922 \), or cooperative pattern \( B = .979, p = .031, OR = 2.661 \). Furthermore, adolescents that were younger at time of the divorce were more likely to belong to the negatively disengaged pattern than to the other patterns, that is, the average pattern \( B = .234, p = .003, OR = 1.264 \), the cooperative pattern \( B = .223, p = .006, OR = 1.249 \), or the negatively engaged pattern \( B = .414, p < .001, OR = 1.514 \). Additionally, adolescents that were older at time of the divorce were more likely to belong to the negatively engaged pattern than to the average \( B = -.180, p = .045, OR = .835 \) and the cooperative pattern \( B = -.192, p = .029, OR = .826 \).

**Post-divorce Coparenting Patterns and Adolescent Adjustment**

To examine whether the post-divorce coparenting patterns were associated with different psychosocial outcomes for adolescents, we estimated and compared mean levels of internalizing and externalizing problems across the different classes. Table 3 presents the comparison of means, both with and without controlling for adolescent sex, age, age at time of divorce, contact frequency with parents, presence of a stepparent, and adolescents’ perceptions of paternal and maternal warmth. Initial results showed that mean levels of internalizing behavior were significantly higher for adolescents in the negatively engaged pattern compared to the other patterns. Additionally, adolescents in the average pattern reported significantly higher levels of internalizing behavior than adolescents in the cooperative pattern. Also, adolescents in the average and negatively engaged pattern reported significantly higher levels of externalizing behavior than adolescents in the cooperative pattern. No other significant differences in externalizing and internalizing behavior between post-divorce coparenting patterns were found.

After controlling for adolescents’ reported parental warmth and several background characteristics, the differences reported above remained significant. In addition, we found significant differences in externalizing behavior between adolescents in the negatively disengaged pattern and the cooperative pattern, with those in the negatively disengaged pattern showing higher levels of problem behavior. Taken together, we found that adolescents belonging to the cooperative pattern reported the lowest amount of both internalizing and externalizing problem behavior. Whereas adolescents in the negatively engaged pattern showed significantly more internalizing behavior than those in the other three patterns,
they did not differ in externalizing problem behavior from those in the average and negatively disengaged pattern.

Table 3

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Negatively disengaged</th>
<th>Negatively engaged</th>
<th>Cooperative</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 31</td>
<td>N = 49</td>
<td>N = 78</td>
<td>N = 93</td>
</tr>
<tr>
<td>Respect</td>
<td>1.60 (0.10)</td>
<td>2.33 (0.12)</td>
<td>3.65 (0.11)</td>
<td>2.75 (0.14)</td>
</tr>
<tr>
<td>Communication</td>
<td>1.07 (0.03)</td>
<td>2.53 (0.18)</td>
<td>4.00 (0.11)</td>
<td>3.20 (0.14)</td>
</tr>
<tr>
<td>Conflict</td>
<td>2.25 (0.13)</td>
<td>3.33 (0.28)</td>
<td>1.22 (0.04)</td>
<td>2.07 (0.12)</td>
</tr>
<tr>
<td>Triangulation</td>
<td>1.90 (0.10)</td>
<td>2.75 (0.20)</td>
<td>1.33 (0.04)</td>
<td>1.83 (0.10)</td>
</tr>
</tbody>
</table>

Note: Equality of indicator means between latent classes was tested using Wald Test of Parameter Constraints. Equality of outcome means between latent classes was tested using the BCH procedure. Means in the same row that do not share at least one subscript differ at p < .05. Standard errors are in the parentheses. *Indicates internalizing and externalizing problems were examined with and without background characteristics and parental warmth as control variables.

**DISCUSSION**

Each year, a considerable number of children is faced with the divorce or separation of their parents, which is associated with an increased risk of problems that may persist well into adolescence and adulthood (Amato, 2010). Understanding families as systems that are composed of interrelated subsystems is crucial for understanding adolescents’ psychosocial adjustment after divorce (Cox & Paley, 2003). This study focused on how parents interact with each other in relation to their adolescent child. Rather than examining coparenting dimensions (coparental communication, respect, conflict, and triangulation) individually, we adopted a person-centered approach and identified distinct patterns of post-divorce coparenting. The current study validated and built on previous studies on post-divorce coparenting patterns (e.g., Amato et al., 2011; Beckmeyer et al., 2014) by involving the perspectives of adolescents themselves. Moreover, we investigated the role of adolescent-informed post-divorce coparenting patterns in self-reported internalizing and externalizing problem behavior, as this association had been studied to a limited extent. Our findings are in line with family systems theory and
suggest that interactions in the coparental subsystem are associated with adolescent adjustment and can therefore be viewed as both a risk and protective factor.

Latent class analysis was used to identify post-divorce coparenting patterns based on adolescents’ reports on the psychometrically validated Coparenting Behavior Questionnaire (Schum & Stolberg, 2007). Four distinct patterns were identified in our sample: A cooperative, negatively engaged, negatively disengaged, and an average pattern of coparenting after divorce. As expected, these patterns are comparable to those identified in previous studies using parent-reports. Especially the cooperative pattern, characterized by high levels of communication and respect and low levels of conflict and triangulation, has consistently been found for about one-third of parents after divorce in previous studies. The negatively engaged pattern found in our study resembles prior mixed (Maccoby et al., 1990) or high conflicted patterns (Lamela et al., 2016). Parents in this group have a relatively high number of conflicts, yet they do not score lowest on respect and communication. The parents in the negatively disengaged pattern combine lowest levels of respect and communication with levels of coparental conflict and triangulation that are equal to parents in the negatively engaged pattern. Hence, this pattern resembles the parallel (Amato et al., 2011), infrequent but conflictual (Beckmeyer et al., 2014) or conflicted patterns (Maccoby et al., 1990) identified in earlier studies. It has been suggested that both the prevalence and severity of coparental conflicts strongly vary across samples, and that variations in these conflict-characterized patterns are therefore not unusual (Amato et al., 2011). In our sample, the largest class, that is, the average class consisted of parents that scored average on all coparenting dimensions, and thus neither scored lowest or highest on positive nor negative coparenting behaviors.

Analysis of the role of background characteristics in adolescents’ class membership revealed that age, contact frequency with mothers and fathers, and presence of a stepparent were not of significant importance. However, girls were overrepresented in the negatively engaged pattern compared to boys. One possible explanation is that girls tend to experience elevated levels of communion towards parents, increasing their vulnerability to coparental conflict (Davies & Lindsay, 2004), and consequently their reports of coparental conflict. In addition, results showed that adolescents that were younger during the divorce were more likely to belong to the negatively disengaged pattern compared to the other patterns. It has been hypothesized that coparenting relations become more parallel the more time has passed since the divorce (Maccoby et al., 1993). Although this could apply to our sample, it is remarkable that the amount of conflict in this group is still
relatively high, as rates of high conflict typically decrease in the years following divorce (Fischer, de Graaf & Kalmijn, 2005).

The second aim of this study was to explore whether adolescents’ self-reported adjustment differed based on the identified coparenting patterns after divorce. Our findings showed significant associations between post-divorce coparenting and adolescent internalizing and externalizing problem behavior, both with and without controlling for several background characteristics and reports on paternal and maternal warmth. In line with findings from Amato et al. (2011) and Lamela et al. (2016), adolescents in the cooperative pattern reported the least amount of internalizing and externalizing behavior. In addition, we found that adolescents in the negatively engaged pattern reported the most internalizing behavior. Although previous studies found no support for negative and conflicted coparenting as a risk factor, our findings are in line with family systems theory. It appears that the relatively high levels of conflict and triangulation combined with average levels of coparental engagement (in terms of communication and respect) increases adolescents’ exposure to negative coparental interactions, which may threaten their internalizing adjustment. However, this is not reflected in the level of externalizing problems in this group. One explanation could be that standard deviations and mean levels of externalizing problems were smaller/lower than those of internalizing problems. This was the case in our sample, but has also been noted in previous studies, and typically makes differences in externalizing behavior small and nonsignificant (Amato, 2010). On the other hand, factors other than post-divorce coparenting quality may play a more important role in adolescents’ externalizing adjustment.

It should be noted that the associations between coparenting and adolescent adjustment found in this study could potentially partially be explained by adolescents’ perceived coparenting behaviors. Furthermore, other family processes, such as parenting, are likely to have an equal or potentially even stronger effect on adjustment outcomes. From a family systems perspective, the family as a whole is greater than the sum of its parts (Cox & Paley, 2003). As such, the quality of coparenting, parenting, and individual parent-child relationships are all interrelated, and therefore all crucial to take into account in order to understand adolescents’ post-divorce adjustment. Finally, it is important to note that the relations between post-divorce coparenting patterns and adolescent adjustment are likely to be bidirectional, and our study does not provide any evidence for direction of effects. Healthy adolescent adjustment can also invoke positive interactions between parents, and adolescent maladjustment can be a stressor to
the coparental relationship after divorce, or a risk for perceiving coparenting more negatively.

Limitations and Directions for Future Research
Even though this study is strengthened by its use of adolescent reports, validated post-divorce coparenting measures and advanced statistical techniques, it also has its limitations. One major limitation is that results are based on cross-sectional data, making it impossible to draw any conclusions on the causal effects of post-divorce coparenting patterns on adolescent adjustment. Equally plausible is that adolescent problems may place strain on an already fragile coparenting relationship. To approach causality, research is required in which adolescents would be followed over a longer period of time, preferably even before the divorce. This would also provide an opportunity to learn more about the stability of coparenting patterns after divorce. Furthermore, however important it is to include adolescents’ perceptions on concepts that are typically reported on by parents, the fact remains that our study is based on the perceptions of single informants. We believe that future research would benefit from parent as well as adolescent reports on post-divorce coparenting and adolescent adjustment, so that possible differences in views between adolescents and parents could be investigated. Finally, although our study examined effects of coparenting on adolescent adjustment, while accounting for parental warmth, future research that includes the quality of parenting and parent-adolescent relationships is necessary for a better understanding of family dynamics in adolescent adjustment after divorce. Nevertheless, our study has contributed to knowledge on present-day coparenting and relations with adolescent adjustment.

Implications for Practice
In line with family systems theory, our findings support the hypothesis that cooperative coparenting is the most desirable with regards to adolescents’ internalizing and externalizing behavior after divorce. Ideally, coparents would strive to develop or maintain a relationship characterized by mutual respect, collaboration, effective communication, and harmony after divorce. Adolescence is a critical life period to accomplish key developmental tasks, and parents continue to serve as important sources of support during this period (Gavazzi, 2011). Cooperative coparenting ensures that parents have mutual expectations about their child’s needs. However, our findings also show that not all parents are able to achieve a cooperative relationship after divorce. This cannot simply be blamed on a lack of skill, knowledge, or willingness of parents, but also has to do with negotiating and organizing new family boundaries, roles, and routines following divorce (Russell, Beckmeyer, Coleman, & Ganong, 2016). Fathers for example have
been found to perceive legal and financial issues as barriers to coparenting, whereas mothers experience negative perceptions of the other parent’s fitness as a barrier (Russell et al., 2016). Additionally, geographical distance, and non-family friendly working hours may stand in the way of the forming a cooperative coparental relationship after divorce (Steinbach, 2019). Yet, in the Western world, both practice and divorce legislation focus on promoting equal parenting and joint physical custody, and therefore some sort of cooperative coparenting. As an alternative for cooperative coparenting, parents after divorce should strive to minimize their children’s exposure to conflict. If legal and mental health professionals continue to mediate conflicted coparents into becoming cooperative, they might keep the level of engagement as well as the level of conflict high (Sullivan, 2008). Disengaging feuding coparents and teaching them skills to be effective parents when they are alone with their children, rather than being dependent on the coparent, may provide a good solution in those cases (Cottyn, 2009). After all, a positive home environment should be the aim of all parents after divorce.
CHAPTER 5
Adolescents’ Belonging in Divorced Families:
Examining Residential and Digital Contact with Mothers
and Fathers
ABSTRACT

Using self-report data of 166 adolescents from divorced families ($M_{age} = 14.3; 60.8\%$ girls), this study examined longitudinal associations between the quantity and quality of parent-adolescent residential contact and digital contact, as well as their unique and joint role in adolescents’ sense of family belonging. Cross-lagged path analyses showed concurrent and some longitudinal associations among residential and digital contact, suggesting that higher-quality interactions can contribute to positive changes in post-divorce contact, although differently for fathers and mothers. Digital contact with parents did not predict family belonging, neither directly nor jointly with residential contact. The general quality of parent-adolescent relationships was the strongest predictor of family belonging. Taken together, the results suggest that post-divorce relationships require frequent and meaningful time together, the effects of which, however, do hardly transfer over time in terms of adolescents’ family belongingness.

Keywords
Parental divorce/separation, family belonging, parent-child relationships

Reference (Currently under Review)

Author Contributions
ZR, IvdV, and SB conceptualized the study. ZR, IvdV and SB were responsible for the collection of data. ZR analyzed the data, and wrote the manuscript. All authors provided feedback on the manuscript.
INTRODUCTION

The need to belong is considered a fundamental human need and an important aspect of psychological functioning throughout the lifespan (Baumeister & Leary, 1995; Baumeister et al., 2007). Having strong and enduring interpersonal bonds with others can serve as a protective mechanism against a range of emotional, behavioral, and academic problems, particularly during adolescence (Jose et al., 2012; Witherspoon et al., 2009). For youth, the family is typically the primary and most proximal social context in which belongingness takes place (Law et al., 2013; Lee & Robbins, 1995). For adolescents growing up in divorced or separated families, however, family belongingness can be disrupted. Studies indicate that they tend to perceive lower levels of belonging than their peers from intact families, and this partially accounts for their diminished adjustment post-divorce (Aslantürk & Mavili, 2020; King et al., 2018; Rejaān et al., 2021a). As posed by family systems theory (Minuchin, 1985), perceptions of belonging to the family system fundamentally depend on the perceived quality of family relationships, especially those with parents (King & Boyd, 2016). Since parental divorce often puts strain on parent-child relationships (Amato, 2010), it is important to examine what relational aspects help meet adolescents’ need for family belonging post-divorce.

Both the quantity and quality of contact can be considered prerequisites for belongingness, as parental presence and involvement are basic requirements for all need-supportive parenting (Grolnick et al., 1999; Soenens et al., 2017), yet the quality of parental presence and involvement needs to be sufficiently high and in support of adolescents’ needs (Bastaits & Pasteels, 2019; Grolnick et al., 1999; Adamsons & Johnson, 2013). One aspect of post-divorce contact quantity is the form of custody or residence arrangements (Nielsen et al., 2014; Steinbach & Augustijn, 2021). However, this may only be an approximation of actual contact quantity, as digital media are intertwined in present-day family life and bring new ways of family contact (Williams & Merten, 2011). Phone calls, video calls, and text messages can increase feelings of belonging between users when physically apart (Ryan et al., 2017), and may therefore be important in maintaining contact and belongingness in divorced families too (Saini et al., 2013). As such, this study examined the longitudinal associations between the quantity and quality of adolescents’ residential contact and digital contact with fathers and mothers in between residential stays, as well as the role of parent-adolescent contact in adolescents’ family belonging after divorce. With that, it examined whether adolescents’ digital contact with parents could be a tool for promoting post-divorce belongingness.
Post-Divorce Family Belonging

Family belonging broadly refers to one’s feelings of being at home and included within the family (Leake, 2007). The drastic changes and negative family processes that often take place in families after a parental divorce or separation (Amato, 2010) can pose challenges for the extent to which youth experience family belongingness (for a review, see Rejaän et al., 2021c). Because the meaning of home is centered around family relationships, it may shift when common divorce-related events occur, like when parents re-partner and move in together (Campo et al., 2020; Smart, 2007). Qualitative findings emphasize the importance of parental ‘proximity’ (physical closeness) and ‘presence’ (being emotionally and mentally aware of each other) as a constant factor in youth’s sense of home after parental separation (Campo et al., 2012; 2020). Cross-sectional quantitative evidence on divorced families in the 1990s reflects the latter, namely that the quality of adolescents’ relationship with their resident biological parent, contrary to the nonresident biological parent, was the strongest predictor of adolescents’ belongingness to the single parent families or married stepfamilies in which they resided (King et al., 2016; 2018).

Since the 1990s, however, shared parenting after divorce has gradually become more common in many Western countries (Steinbach et al., 2020), making the distinction between resident and nonresident parents less meaningful today. In the Netherlands and Sweden, for example, one-third of youth from post-divorce families live about the same amount of time with both parents (Poortman & Van Gaalen, 2017; Turunen et al., 2017). Moreover, arrangements in which children spend at least 30% of their time with both parents – also referred to as ‘shared residence’ or ‘asymmetric joint physical custody’ – are even more prevalent (Steinbach & Augustijn, 2021). With many youngsters alternating between both their parents after divorce, ergo between two families which often also include new family members (Sanner et al., 2018), it is warranted to examine their post-divorce belongingness to each household separately. Prior studies showed positive associations between both maternal and paternal family belonging and adolescent adjustment outcomes, but also revealed that adolescents generally experience stronger feelings of belonging to maternal than paternal households (Aslantürk & Mavili, 2020; Rejaän et al., 2021a).

Post-Divorce Contact Quantity and Quality

These differences in adolescents’ maternal versus paternal family belonging are likely connected to differences in mother-adolescent versus father-adolescent contact after divorce. That is, children typically still reside a greater amount of time with their mothers than with their fathers after divorce (Steinbach et al., 2020;
Poortman & Van Gaalen, 2017). Associations between residence arrangements and youth outcomes have been studied extensively, mostly suggesting that those in shared arrangements generally have better psychosocial outcomes and better relationships with both parents (Nielsen, 2014). At the same time, meta-analytic results show that even within shared arrangements, the strength of these associations varies by the amount of time that children actually spend with each parent (Baude et al., 2016). More equal arrangements provide the best framework to shape or maintain strong relationships with each parent (Bastaits & Pasteels, 2019; Baude et al., 2016). Especially for fathers, shared arrangements increase the likelihood that they will be involved in their children’s lives following divorce (Fabricius et al., 2012; Sobolewski & King, 2005). The perspectives of youth on post-divorce contact, however, are still understudied, while they can give important insights into the interrelatedness of contact quantity and quality when growing up in two households (Marschall, 2014).

An important benefit of frequent residential contact and overnight stays is that it enables divorced families to experience the natural rhythms of everyday life together, including routines of sharing meals, doing homework, and enjoying leisure time (Cashmore et al., 2009; Lamb & Kelly, 2001; Lamb, 2018). Families need such everyday interactions in order to foster close relationships and a sense of home after divorce (Campo et al., 2020, 2021; Rodriguez, 2014). For children, however, being with one parent also means being separated from the other, which can result in a perpetual state of longing for one parent, despite shared enjoyment with the ‘present’ parent (Sadowski & McIntosh, 2016). Further, not residing in the same household can inhibit children from communicating with parents about important issues (Bjarnason & Arnarsson, 2011). It also limits parents’ ability to be aware of mundane details of children’s lives, which can make it harder to relate to each other after periods of absence (Rodriguez, 2014; Yarosh et al., 2009). Still, this interplay between absence and presence is a fact of everyday life for many divorced families (Marschall, 2014).

**Connecting Through Digital Media**

Missing each other can be an incentive for adolescents and parents to find other ways to check in with each other regularly (Marschall, 2014). With the increasing affordability and availability of digital communication technologies, there are now new opportunities for contact that are unconstrained by physical proximity (Valkenburg & Piotrowski, 2017). In fact, the current generation of adolescents is accustomed to communicating online: Messaging and (video)calling are the most common internet activity, for example through applications such as WhatsApp, Facebook, Tiktok, Snapchat, and Instagram (Spies Shapiro & Margolin, 2014; Van
Herk, 2019). This has opened a new area of research to explore how digital media use can promote resilience in individuals that have encountered challenges (Stavropoulos et al., 2021), for example youth who need to reorganize their family relationships after a divorce (Saini et al., 2013).

Based on a review study on the use and impact of ICT on parent-child relationships after divorce (Saini et al., 2013), a distinction was hypothesized between ‘transitional’ and ‘replacement’ digital media use. The purpose of transitional digital media use is to maintain contact between regular residential stays as a way to stay connected (Saini et al., 2013). Parents, for instance, expressed that digital contact extended their physical contact and made them feel closer to their children (Wolman & Pomerance, 2012). For children, this could potentially imply a joint effect of frequent digital and frequent residential contact on family belonging. Contrarily, replacement use substitutes residential contact with digital contact in an effort to stay connected without having regular face-to-face time (Saini et al., 2013). Children stated that actual time with parents should not be replaced regularly, as digital contact can feel superficial and cannot facilitate enduring relationships by itself (Gollop & Taylor, 2012; Saini et al., 2013). Hence, it is mainly the opportunity to digitally engage in relationships that are already largely maintained live that is expected to promote adolescents’ relationships with parents, and with that, potentially family belongingness (Baumeister & Leary, 1995).

Findings on social media use more generally also indicate that a combination of frequent digital contact and stronger quality relationships between users had the most optimal psychological outcomes for adolescents, though longitudinal evidence was scarce and did not demonstrate significant effects over time (Ryan et al., 2017; Liu et al., 2019). Nevertheless, findings suggest that when media are used to facilitate meaningful relationships, they are found to improve wellbeing, whereas they may decrease wellbeing when they replace time interacting with important others in real life (Allen et al., 2014; Liu et al., 2019). However, for families who are motivated to sustain close relationships while apart, for instance because of military deployment, it appears that digital tools can facilitate frequent and emotionally warm and supportive communication between parents and children (Friedman et al., 2017; Sigelman et al., 2018), and can generate a sense of co-presence while being apart (Baldassar, 2016; Nedelcu & Wyss, 2016). Thus, in exploring adolescents’ digital contact quantity and quality with parents after divorce, it is important to also consider how they are associated with the quantity of their residential contact and the general quality of their relationship, particularly when examining the role of contact in adolescents’ post-divorce family belongingness.
The Current Study

Given that many adolescents after divorce nowadays spend a substantial amount of time with both parents, and thus in two families, this study aimed to examine the role of digital media in their relationships with mothers and fathers, as well as their belongingness to maternal and paternal households. We first explored cross-lagged associations between the quantity and general quantity of adolescents’ residential contact with parents, and the quantity and quality of their digital contact. Previous studies found strong associations between the quantity and general quality of residential contact (Bastaits & Pasteels, 2019; Nielsen, 2014), and we expect this to also apply to digital contact. As such, we hypothesized positive associations between quantitative and qualitative aspects of both types of contact. Further, we expected that digital media would generally be used as a transitional tool (Saini et al., 2013), and accordingly hypothesized positive associations between their residential and digital contact quantity. Given that adolescents typically spend a greater amount of time in maternal households, we hypothesized that digital media may be more important in facilitating adolescents’ relationships with fathers, than it is for facilitating relationships with mothers. Finally, we investigated the role of parent-adolescent contact in adolescents’ perceptions of family belonging to each parental household, by examining direct effects of residential and digital contact on belonging over time, and exploratively testing whether digital contact moderated the effects of residential contact on family belonging.

METHODS

Procedure

We used self-report data of adolescents from the research project Where do I Belong, an (at the time) ongoing longitudinal study with 9-month intervals and two available waves, collected between January 2019 and July 2021. To optimize sample size and heterogeneity, divorced families throughout the Netherlands were recruited in a variety of ways: Through schools, legal and health care professionals, targeted print and online advertisements, and snowball sampling. After receiving detailed information about the study, parents and adolescents each signed an online informed consent form. Respondents individually filled out online questionnaires, taking 40 to 60 minutes, and received a small monetary compensation for their contribution (€10) in each measurement wave. Families could withdraw their participation at any time during or after completing the questionnaires, and without stating reasons. This research protocol was approved by the Faculty Ethics Review Board (FERB) of the Social Sciences Faculty of Utrecht University (Protocol code: FETC18-008).
Sample
The study sample consisted of 166 adolescents from 129 divorced and separated families, among which 96 families with one participating child, 29 families with two participating children, and 4 families with three participating children. Among participating adolescents were 65 boys and 101 girls (60.8%), aged 11 to 18 years old at Wave 1 ($M = 14.34$, $SD = 1.84$). The majority (89.2%) attended secondary school, with 21.2% of them following the pre-vocational education track, 26.5% the pre-professional track, and 41.5% the pre-academic track. The remaining respondents attended the final year of primary education (3%), first years of higher education (6.6%) or no education (1.2%). As to their cultural background, 98.2% identified as (partly) Dutch, and most considered themselves non-religious (77.4%) or Christian (17.9%).

Among the 129 divorced and separated families, 72.1% of parents used to be legally married, whereas 27.9% were formerly cohabitating. On average, adolescents were 7.73 years old ($SD = 3.93$) during the parental divorce, and the time since divorce ranged from 0 to 16 years 1 ($M = 6.61$, $SD = 3.94$). As to their residence arrangements, 27 adolescents (16.3%) reported living solely [100% of the time] with their mother, 46 (27.7%) living mostly [67-99%] with their mother, 84 (50.6%) living with both parents [33-66%], and 9 (5.4%) living mostly or solely with their father (see Residential Contact Quantity under Measures). Most adolescents reported having siblings (partly) residing with their mother (86.0%) or father (78.3%), and many also reported at least one stepparent, half- or stepsibling (partly) residing in their mother’s (49.6%) or father’s household (67.5%).

Residential Parent-Adolescent Contact Measures
Residential Contact Quantity. The amount of residential contact between adolescents and parents was measured with the Residential Calendar (Sodermans et al., 2014). This is a visual depiction of four regular weeks in which respondents were asked to indicate whether they stay with their mother or their father, for each day and night. Based on this measure, we calculated the proportion of time that participants on average spent with each parent over the course of a week. This resulted in two separate, opposing variables ranging from 0 to 7 days/nights per week: Residential contact quantity with mothers ($M = 4.67$) and fathers ($M = 2.33$).

General Relationship Quality. Adolescents’ perceived relationship quality with each parent was measured by two scales of the Coparenting Behavior Questionnaire (CBQ; Schum & Stolberg, 2007): Parental warmth and parental involvement. Participants were asked to assess items on a Likert scale ranging from
1 (almost never) to 5 (almost always). Warmth was measured by 7 items, such as “My father/mother enjoys spending time with me”. Involvement was measured by 5 items, such as “My father/mother knows my teachers and how I am doing at school”. Correlations between scales for each parent in each wave ranged from $r = .40$ to $r = .60$ ($p < .001$), and internal consistency of the 12 items was good for mothers ($\alpha = .89$, $\alpha = .86$) and fathers ($\alpha = .92$, $\alpha = .91$) in both waves, respectively. Therefore, items were combined into average scores, with higher scores indicating stronger overall relationships with parents.

**Digital Parent-Adolescent Contact Measures**

**Digital Contact Quantity.** The amount of digital contact during times spent apart was assessed by the following question: “When residing with your father/mother, how often did you interact with your mother/father in the following ways: a) through phone calls, b) through video calls, or c) messages”. For each type of contact, adolescents assessed the frequency during the past month, ranging from 1 (not at all) to 6 (multiple times a day). Ratings of phone calls, video calls and messages were combined into an average score, ranging from 1 to 6, with higher scores indicating more frequent digital contact with parents.

**Digital Relationship Quality.** Adolescents’ perceived digital relationship quality with each parent was assessed by two scales from an instrument that was initially designed to measure affective costs and benefits of communication technologies (Yarosh et al., 2014). Participants were asked to evaluate a total of 7 statements regarding their digital contact with each parent, on a Likert scale ranging from 1 (never) to 5 (always). Their sense of ‘presence-in-absence’ was measured by 3 items, starting with “After using digital media together…”: a) “I feel close to my parent”, b) “I often think about the things my parent and I shared with each other”, and c) “I feel more connected to my parent”. Perceived social support through digital media was measured by 4 items: a) “Contact with my parent makes me feel special”, b) “My parent is there for me over digital media when I need her/him”, c) “Contact with my parent through digital media helps me feel better when I’m having a bad day”, and d) “I worry less about things after interacting with my parent through digital media”. Correlations between scales for each parent in each wave ranged from $r = .65$ to $r = .72$ ($p < .001$). Internal consistency of the 7 items was good for mothers ($\alpha = .86$, $\alpha = .87$) and fathers ($\alpha = .85$, $\alpha = .86$) in both waves, and were combined into average scores with higher scores indicating stronger digital relationships with parents.
Belonging Measures

Family Belonging to Both Parental Households. Perceptions of family belonging were measured as a mean score of four items, each with response options ranging from 1 (very little) to 5 (very much), based on King and Boyd’s study (2016). However, instead of reporting on their sense of belonging to the divorced family as a whole, adolescents reported separately on their sense of belonging to each household: a) “How much do you feel your family in your father’s/mother’s home understands you?”, b) “How much do you feel you and your family in your father’s/mother’s home have fun together?”, c) “To what extent do you feel your family in your father’s/mother’s home pays attention to you?”, and d) “How much do you feel you want to leave your father’s/mother’s home? (reversely coded). Internal consistency was good for maternal ($\alpha = .78$, $\alpha = .74$) and paternal households ($\alpha = .86$, $\alpha = .87$) in both waves, respectively.

Statistical Analyses

Missing Data. Of all 166 participants, 139 (83.7%) participated in both measurement waves. There were no differences on any of the background characteristics at Time 1 between those who participated in one versus two waves. However, participants with data on two waves had higher levels of family belonging to maternal homes at T1 ($M = 4.33$, $SD = .58$), than those with only one wave of data ($M = 3.97$, $SD = .82$), $t(164) = -2.70$, $p = .008$. No differences were found on any of the other study variables at T1. Next, missing data patterns were examined. In total, 16.4% of data was missing, and missing data per variable ranged from 0% to 41.6%. Although Little’s missing completely at random test (1988) was significant, the normed chi-square of 1.29 was acceptable (i.e., $\chi^2/df < 2$; Bollen, 1989). The latter implied that the data could be accounted for by means of Full Information Maximum Likelihood estimations (FIML; Muthén & Muthén, 1998-2018).

Strategy of Analyses. Multiple adolescents from the same family were included in the study, which violates the assumption of independence of the data. Within-family dependency was accounted for by using the ‘complex’ sample cluster feature in combination with the Maximum Likelihood Robust (MLR) estimator. This is a conservative clustering procedure that provides unbiased estimates of the standard errors (Muthén & Muthén, 1998-2018). First, cross-lagged path analyses were conducted for adolescents’ contact with fathers and mothers separately, to test concurrent and over time associations between residential contact quantity, general relationship quality, digital contact quantity, and digital relationship quality. Next, regression analyses were performed to examine direct effects of post-divorce contact at T1 on family belonging at T2, and moderation effects of digital contact (quantity and quality) in the association between residential contact
(quantity and general quality) on family belonging at T2 (see Figure 1). Again, we tested two separate models for adolescents’ sense of belonging to paternal and maternal households. In addition to the depicted direct and moderation effects, we also examined adolescents’ age, sex, and time since divorce as covariates, and included correlations between moderating variables in the models. In a second step, family belonging at T1 was included in the model to examine whether contact quantity and quality predicted relative change in belonging across time.

**Figure 1**

*Conceptual Model for RQ.2: Main and Joint Effects of Parent-Adolescent Contact on Adolescents’ Family Belonging*

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**RESULTS**

**Descriptive Statistics and Correlations**

In Table 1, the correlations and descriptive statistics of the study variables are presented separately for adolescents’ contact with mothers and fathers after divorce. Results showed that participants on average spent one third of the week in fathers’ residence, and their remaining time in mothers’ residence. The quantity of digital contact with mothers and fathers was approximately equal and ranged from once to several times per week. For descriptive purposes, we also looked at the amount of digital contact per medium, which showed that text messages were most frequently used in contact with mothers and fathers ($M = 3.82; 3.85$, respectively), followed by (online) phone calls ($M = 2.48; 2.52$), and video calls ($M = 1.44; 1.40$). On average, adolescents perceived the quality of their relationship with mothers to be higher than with fathers, both generally and digitally. Likewise, the reported level of belonging to mother’s family was higher than to father’s family.
Table 1

Correlations Between Study Variables for Mothers and Fathers (N = 166)

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<sup>M</sup> 2.33<sub>b</sub> 3.84<sub>b</sub> 2.63<sub>a</sub> 2.69<sub>b</sub> 3.84<sub>b</sub> 14.34  .61
<sup>SD</sup> 1.63  .82  .82  .79  .91  1.84  .49

<sup>*</sup>p < .05, <sup>**</sup>p < .01. Notes: Statistics related to the relationship with mothers are shown above the grey diagonal, whereas statistics related to the relationship with fathers are shown below the grey diagonal. Statistics within the grey diagonal are correlations between mother and father variables. Adolescents’ sex is dummy coded (0 = boys, 1 = girls). Variable means for mothers and fathers that do not share the same subscript differ at p < .05, as indicated by paired samples t-tests. Abbreviations: Res = Residential; Gen = General; Dig = Digital; CQ = Contact Quantity; RQ = Relationship Quality; <sub>T1</sub> Timepoint 1; <sub>T2</sub> Timepoint 2.
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There were moderate to strong positive correlations between all aspects of mother-adolescent and father-adolescent contact, but only small (T1) and moderate (T2) associations between maternal and paternal family belonging. Of the covariates, age was significantly associated with study variables, with older adolescents reporting a weaker general relationship quality with mothers and fathers, and lower levels of belonging to both households. Furthermore, time since divorce was positively associated with the amount of time adolescents spent in mothers’ residence at T2, and therefore negatively with the amount of time in fathers’ residence.

Correlations between study variables for each parent were mostly significant and in the expected direction: The quantity and quality of both types of contact (i.e., regular and digital) were positively and significantly bidirectionally associated with perceptions of family belonging, concurrently and over time, for fathers as well as for mothers. In addition, there were several differences between mothers and fathers. Whereas for fathers, more residential contact was associated with a stronger general father-adolescent relationship quality, the correlation between residential contact quantity and the general quality of the relationship with mother was nonsignificant. Furthermore, while levels of residential contact with fathers at T1 were positively associated with the amount of digital father-adolescent contact, levels of residential and digital contact with mothers were negatively associated. Thus, the more time adolescents from divorced families spent with their fathers, the more they engaged in digital contact with both of their parents. At T2, the latter associations were nonsignificant. Finally, although digital contact quantity and general relationship quality each were positively correlated with the quality of adolescents’ digital contact with parents, correlations were considerably stronger for fathers than for mothers.

**Cross-lagged Path Analyses for Fathers and Mothers**

Concurrent and over time associations between all aspects of post-divorce contact were further examined using separate cross-lagged path analyses for fathers and mothers (Figure 2). With regard to the stability of the variables for fathers over time, the amount of residential contact was the most stable, whereas the amount of digital contact was least stable of all aspects of father-adolescent contact. Only one of the cross-lagged paths reached significance: Adolescents’ digital relationship quality with fathers significantly and positively predicted their subsequent general relationship quality ($\beta = .16, p = .004$).

Regarding adolescents’ contact with mothers, the amount of residential contact was also the most stable over time, and the amount of digital contact was the least stable. Two cross-lagged paths were significant. The quality of adolescents’ general
relationship with mothers significantly and positively predicted their digital relationship quality ($\beta = .22, p = .004$), and the quality of adolescents’ digital relationship with mothers significantly and positively predicted their amount of digital contact nine months later ($\beta = .27, p = .023$).

**Figure 2**

*Standardized Model Results for Adolescents’ Contact with Fathers and Mothers*

*Note.* Black arrows are significant paths, grey arrows are nonsignificant paths.
Table 2
Regression Results for Father-Adolescent Contact on Paternal Family Belonging and Mother-Adolescent Contact on Maternal Family Belonging

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<td>$SE_B$</td>
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<td>$R^2 = .48^{**}$</td>
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<td>Sex</td>
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<td>.13</td>
</tr>
<tr>
<td>Time s/ divorce</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Res. CQ$^T1$</td>
<td>-.04</td>
<td>.06</td>
</tr>
<tr>
<td>Gen. RQ$^T1$</td>
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<td><strong>.13</strong></td>
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<tr>
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<tr>
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<td>.16</td>
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<tr>
<td><strong>Model 2</strong></td>
<td>$R^2 = .57^{**}$</td>
<td>$R^2 = .53^{**}$</td>
</tr>
<tr>
<td>Age</td>
<td>-.03</td>
<td>.03</td>
</tr>
<tr>
<td>Sex</td>
<td>-.02</td>
<td>.11</td>
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<tr>
<td>Time s/ divorce</td>
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<td>.02</td>
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<tr>
<td>Belonging$^T1$</td>
<td><strong>.76</strong></td>
<td><strong>.09</strong></td>
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<tr>
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<tr>
<td>Gen. RQ*Dig. CQ$^T1$</td>
<td>.26</td>
<td>.13</td>
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Notes: Adolescents’ sex is dummy coded (0 = boys, 1 = girls). Correlations between res. CQ, gen. RQ, dig. CQ, and dig. RQ are included in the model. Significant results are bold. Abbreviations: Res = Residential; Gen = General; Dig = Digital; CQ = Contact Quantity; RQ = Relationship Quality; $^T1$ Timepoint 1; $^T2$ Timepoint 2.

Regression Analyses for Fathers and Mothers
In separate regression analyses, we examined main and interaction effects of residential and digital contact with each parent at T1 on adolescents’ belongingness to each parental household at T2 (results in Table 2). Regression results for fathers demonstrate that out of all covariates and father-adolescent contact variables,
adolescents’ general relationship quality with fathers was the only significant predictor for subsequent paternal family belonging. Thus, residential and digital contact between adolescents and their fathers did not affect adolescents’ sense of belonging to their fathers’ homes when taking into account adolescents’ prior relationship quality with fathers. In total, the model accounted for 34% of the variance in adolescents’ paternal family belongingness. By including paternal family belonging at T1 in the model, the model now explained 57% of the variance in paternal family belonging, with prior belonging as its sole significant predictor. This means that neither residential nor digital father-adolescent contact predicted relative change in adolescents’ paternal family belonging.

In the first model estimating belongingness to maternal households, general relationship quality with mother was a significant and positive predictor for subsequent family belongingness. In addition, adolescents’ age negatively predicted maternal belonging, and residential contact at T1 positively predicted belonging. Further, none of the other factors or interaction terms were significant. In total, the model accounted for 48% of the variance in adolescents’ maternal family belongingness. After including maternal family belonging at T1 in the model, the model explained 53% of the variance in maternal family belonging, with prior belonging as its strongest significant predictor. Additionally, adolescents’ age and the general quality of the mother-adolescent relationship were significant, indicating that lower age and stronger quality relationships with mothers contributed to changes in adolescents’ sense of maternal family belonging over time.

**DISCUSSION**

For many divorced and separated families, the interplay between physical presence and absence is a fact of everyday life that can put pressure on adolescents’ intrinsic need to belong. This study aimed to examine the role of parent-adolescent contact in adolescents’ sense of belonging to paternal and maternal family households post-divorce. In addition to investigating the associations between the quantity and quality of time adolescents spent residing with their parents, we also included the quantity and quality of their digital interactions in between residential stays as a form of contact. Drawing on a sample of 166 adolescents from divorced and separated families, we tested whether online messages, phone calls, and video call during times spent apart facilitated adolescents’ relationships with mothers and fathers, and their sense of belonging to the respective households.

Overall, results showed that digital media were regularly used to communicate with mothers when residing with fathers and vice versa, and that the quantity and
perceived quality of residential and digital contact were concurrently interrelated, although differently for fathers and mothers. Furthermore, we found some over time associations between these different aspects of parent-adolescent contact, suggesting that for fathers, higher-quality digital interactions can facilitate higher-quality father-adolescent relationships. This is important, because for fathers, the association between their residential contact and the general relationship quality is much stronger than for mothers, presumably because adolescents on average reside less days and nights with fathers than they do with mothers. There was no evidence for the existence of unique or joint effects of digital parent-adolescent contact on adolescents’ family belonging over time, and tentative evidence substantiating the importance of strong parent-adolescent relationships for adolescents’ family belongingness.

**Post-Divorce Residential and Digital Contact with Fathers and Mothers**

In line with our expectations, we found a positive association between the amount of residential and digital father-adolescent contact after divorce. This means that adolescents who resided a greater amount of time with their fathers, generally also engaged in more frequent digital contact with them during times spent apart. This is consistent with the hypothesis of digital media being used as a transitional tool, in extension of regular face-to-face contact (Saini et al., 2013; Wolman & Pomerance, 2012). This mutually reinforcing effect of residential and digital contact indicates that digital media could be instrumental in sustaining enduring relationships with fathers after divorce (Fabricius et al., 2012; Kalmijn, 2015). The strong and positive concurrent associations among and across the quantity and quality of residential and digital contact support prior findings that the quantity and quality of contact with fathers are strongly related (Bastait & Pasteels, 2019; Sobolewski & King, 2005), and shows this also holds true for post-divorce digital contact. Moreover, we found a small but significant cross-lagged effect over time, namely that higher-quality digital relationships with fathers contributed to an overall stronger father-adolescent relationship.

As for mothers, there was a negative concurrent association between the amount of residential and digital contact, indicating that adolescents who spent more time in their mother’s residence on average engaged less in digital contact with mothers when apart. Put differently, more face-to-face contact was associated with less digital contact. Further, the quantity and quality of digital contact were concurrently positively associated with each other, as well as with the general mother-adolescent relationship quality. However, adolescents’ residential time with mothers was not related to the quality of their general or digital relationship. Given that adolescents on average spent two third of the week in their mother’s
homes, we can assume that the majority of adolescents had sufficient contact with their mothers for maintaining strong relationships, regardless of digital contact. These results therefore indicate neither replacement nor transitional digital media use between adolescents and their mothers after divorce. Still, our results demonstrated some longitudinal associations relating to adolescents’ digital media use with mothers. Higher-quality general relationships appeared to contribute to higher-quality digital relationships over time, and higher-quality digital relationships were positively associated with the amount of digital contact with mothers. Overall, these interrelations between various aspects of parent-adolescent contact are consistent with previous findings suggesting that parent-child relationships after divorce require continuing, frequent, and meaningful time with parents (Adamsons & Johnson, 2013; Bastaits & Pasteels, 2019), and show that this also applies to digital contact.

Parent-Adolescent Contact and Post-Divorce Family Belonging
Our results did not support the hypothesis that digital media could be a tool for promoting adolescents’ sense of family belonging after divorce. With regard to paternal family belonging, adolescents’ relationship quality with fathers was the only predictor of paternal family belonging, although it did not predict relative change in adolescents’ belonging over time. As to maternal family belonging, the general quality of the mother-adolescent relationship also accounted for substantial variance in family belonging, together with some smaller effects of residential contact quantity and adolescents’ age. Even when taking into account adolescents’ prior maternal family belonging, stronger quality relationships contributed to maternal family belonging over time. The finding that the quality of adolescents’ relationships with each parent is strongly associated with their sense of belonging to the respective households extends previous research that considered post-divorced families as a single family system (King et al., 2016; 2018), translating them to present time during which many adolescents reside in two households post-divorce. Despite expectations, however, we found no other unique or joint effects of parent-adolescent contact on adolescents’ family belonging.

Similar to previous research, adolescents on average experienced higher levels of belonging to maternal than paternal households, and standard deviations showed that there was less inter-individual variability in maternal than in paternal belonging (Rejaän et al., 2021a). Yet, adolescents’ belonging to mothers’ homes appeared less stable over time, and was more strongly and directly dependent on the quality of the overall relationship with mothers than father-adolescent relationships were for paternal family belonging. The negative effect of age on
maternal family belonging could be the underlying factor that explains the greater importance of adolescents’ relationship quality for post-divorce maternal family belonging. That is, adolescents increasingly strive to develop a balance between autonomy and relatedness as they mature, which is often characterized and accompanied by conflicts in the parent-adolescent relationship (Branje, 2018; Deci & Vansteenkiste, 2004). Since adolescents generally resided most of their time with mothers after divorce, it is reasonable to assume that such conflicts occur more in interactions with mothers than fathers, but future research is required to substantiate this. Perhaps it could also apply to father-adolescent relationships for adolescents who reside with fathers the majority of their time.

**Limitations and Suggestions for Future Research**

The present study adds to existing literature by focusing on adolescents’ perspectives of parent-adolescent contact after divorce, in terms of their residential contact as well as their digital contact in between residential stays, taking into account both quantitative and qualitative aspects of contact, and differentiating between paternal and maternal family belonging after divorce. At the same time, there are certain limitations that should not be overlooked. Although our study was longitudinal, it only included two assessment moments, thereby limiting us to using cross-lagged panel models for estimating directional effects among aspects of parent-adolescent contact, despite an ongoing debate about the model’s merits (e.g., Lucas, 2022; Orth et al., 2021). At the same time, this study offers an interesting point of departure for future research. In addition, our sample size was relatively small and consisted of relatively many shared parenting families. It would be interesting to replicate our study in a larger, potentially more heterogeneous sample, as additional power would also allow for the inclusion of several interparental characteristics (Saini et al., 2013) and situational variables (Steinbach & Augustijn, 2021), such as interparental conflict, parental gatekeeping, cooperation and communication behaviors, distance between parents’ homes, and the number of transitions that adolescents made between homes. After all, it seems that there are other variables beyond parent-adolescent contact that might better explain adolescents’ sense of family belonging after divorce, which most likely relate to the substantial divorce-related changes in children’s lives that have been linked to their adjustment in prior studies, such as (step)family composition and relationships (e.g., Amato, 2010; Sanner et al., 2018). As for post-divorce digital media use, future studies should also take into account how individual characteristics, such as one’s need for regular contact or not (Baumeister & Leary, 1995), or how perceived burdens of digital media use may detract from positive outcomes of digital contact. That is, even though our study now focused on the potential affective benefits of digital media use, the availability of digital
communication tools may also introduce unwanted obligations to connect, threaten feelings of privacy, and risk youth feeling guilty or disappointed (Yarosh et al., 2009; 2014).

**Conclusions**

Taken together, this study revealed that divorced families widely use digital media to maintain contact in between residential stays, and that the quantity and quality of their digital contact is associated with the quantity and quality of their residential contact. Our study shows that higher-quality parent-adolescent interactions can also facilitate positive changes in post-divorce contact over time, such as more frequent digital contact with mothers. Additionally, a particularly important finding is that higher-quality digital relationships seem to reinforce adolescents’ ties with fathers. However, although the quantity and quality of digital contact are cross-sectionally related to stronger perceptions of family belonging, more and/or more positively perceived digital contact do not appear to strengthen belonging over time. Nevertheless, the opportunity to text, call or video message someone in any given place and time has become indispensable in today’s society, and therefore in present family life. Since post-divorce relationships continue to require frequent and meaningful time with parents, more knowledge on the role of digital media in parent-adolescent contact could contribute to both the scientific and clinical field in our joint efforts to improve adolescents’ adjustment after a parental divorce or separation. For now, our understanding is that post-divorce parent-adolescent contact and qualitative appraisals thereof mostly appear to reinforce adolescents’ concurrent experiences of belonging.
CHAPTER 6

Parenting, Coparenting, and Adolescents’ Sense of Autonomy and Belonging after Divorce
ABSTRACT

One of the most direct consequences of a parental divorce is the change from daily contact with both parents to diminished and regulated contact via established living arrangements. Parenting and coparenting might affect adolescents’ autonomy in decision-making regarding living arrangements, as well as their experiences of belonging within the family. This study tested whether parental warmth and autonomy support and coparental cooperation and conflict affected adolescents’ sense of autonomy and belonging after divorce, using self-report data of 191 Dutch adolescents ($M_{age}$ = 14.36; 61.3% girls) and 227 divorced parents ($M_{age}$ = 46.08; 74% mothers). Results of random-intercept cross-lagged panel models showed that stable differences between families explained most of the links between parent-reported (co)parenting and adolescent-reported autonomy and belonging. The findings indicated that adolescent autonomy was associated with coparental dynamics and parental autonomy support, whereas adolescent belonging was solely associated with parenting dynamics. On the within-family level, there were no significant cross-lagged associations among (co)parenting and adolescent autonomy or belonging, meaning that within families, changes in parents’ behaviors did not predict adolescents’ need-based experiences or vice versa. Practical implications and directions for future research are discussed.

Key Words
Parental Divorce; Adolescence; Coparenting/Parenting; Post-Divorce Living Arrangements; Self-Determination Theory

Reference (Currently under Review)

Author Contributions
ZR, IvdV, WS and SB conceptualized the study. ZR, IvdV and SB were responsible for the collection of data. ZR analyzed the data, and wrote the manuscript. All authors provided feedback on the manuscript.
INTRODUCTION

Growing up post-divorce constitutes a risk for offspring wellbeing and functioning in various domains (e.g., Amato, 2010; Tullius et al., 2021). Yet, the mechanisms through which divorce affects youth, and the processes that can explain interindividual variability in their adjustment are less well understood. This study focused on how interactions with parents and among parents affect adolescents’ need-based experiences post-divorce. From a self-determination perspective, a parental divorce or separation has the potential to undermine adolescents’ needs for autonomy, competence, and relatedness – three basic needs that are considered essential and universal nutrients for healthy psychosocial development (Friendly & Grolnick, 2009; Ryan & Deci, 2000). That is, one of the most direct consequences of a divorce for adolescents is how contact with both parents is organized via post-divorce living arrangements. These arrangements substantially and continuously affect the daily lives of adolescents, as they impact how routines of school, hobbies, and leisure time activities take place, and provide the framework through which family life is organized (Campo et al., 2012). We argue that in the context of divorce, autonomy and competence needs are supported when adolescents experience ownership of their choices and efficacy in post-divorce decision-making processes concerning living arrangements, and relatedness needs are supported when they experience a sense of belonging to the family household(s) in which they reside. This study examined whether parenting and coparenting dimensions are longitudinally associated with adolescents’ perceptions of autonomy in decision-making and their feelings of family belonging in divorced or separated families.

**Parental Divorce as a Risk for Adolescents’ Need-Based Experiences**

Post-divorce living arrangements are an important means for families to adapt to the post-divorce circumstances, both via their contents and by how they are negotiated by families at home. Divorce law can thereby serve as an initial institutional aid, for instance by obliging divorcing and separating parents with joint parental authority to formalize arrangements of care and upbringing of their minor children (De Bruijn, 2018). Moreover, the UN Convention on the Rights of the Child prescribes that children after divorce have the right to express their views on living arrangements, and to have these views given due weight to by decision-makers – including their parents. In accordance with this, in the Netherlands, parents must state in a parenting plan how they have involved their children in the process of making living arrangements. Child involvement would lead to more inclusive, more informed, and therefore better decision-making in the interests of children (Mol, 2021; Parkinson & Cashmore, 2008; Schrama et al., 2021). However, it is unclear to what extent youth are indeed involved or feel they are taken seriously in these decision-making processes at home. Furthermore, parenting
plans usually do not contain the option to renegotiate arrangements when the situation calls for it (De Bruijn, 2018). A divorce regularly results in a series of future transitions in children’s lives, such as parental cohabitations, remarriages, and divorces (Amato, 2010). Moreover, children’s perspectives on the functionality of arrangements likely change as they age, in accordance with their developmental needs (Berman, 2018; Kitterød & Lidén, 2020). How and which decisions on living arrangements are made may thus be a recurring theme for divorced families with children living at home, and so it is important to examine adolescents’ need-based experiences after divorce, both in terms of autonomy and belonging.

**Adolescents’ Post-Divorce Autonomy and Belonging**

Adolescents’ basic needs for autonomy and competence are very closely related in the context of post-divorce living arrangements, as both autonomy and competence concern whether adolescents experience volition and ownership of their behaviors and choices, and mastery over their social environment (Deci & Ryan, 2008; Van Petegem et al., 2012). Particularly, imposed or unsatisfactory post-divorce arrangements are expected to directly obstruct adolescents’ autonomous functioning. It thus seems warranted to give adolescents a voice, and qualitative findings illustrate that this can take several forms (Birnbaum & Saini, 2012). The most obvious one is through actual participation, referring to the act of expressing views, being heard, and having these views considered (Mol, 2021). It seems that youth are generally interested in providing their input on living arrangements, whether they work, and how they can be improved (Birnbaum & Saini, 2012; Berman, 2018). Some youth, however, worry about having a decisional role in a situation with potentially conflicting loyalties and therefore choose not to participate, which should also be their right (Cashmore & Parkinson, 2008; Campbell, 2008). Regardless, adolescents’ need for autonomy may also be satisfied when they believe that parents are responsive to their living situation-specific needs, and when they feel that their wishes and interests are sufficiently taken into account (Berman, 2018). This too could respect and acknowledge their need for agency (Cashmore, 2011; Haugen, 2010). A third form of autonomy can be perceived through the flexibility of arrangements and freedom to deviate from them (Birnbaum & Saini, 2015). Some adolescents find scheduled contact unnecessarily rigid and restrictive (Kelly, 2007) or prefer the opportunity to spend additional time with a parent when they please (Kitterød & Lidén, 2020). Finally, given the different forms youth can and may prefer to be involved in decision-making, satisfaction with existing arrangements should also be considered. Although some degree of influence seems to be connected to their satisfaction with the contents of arrangements (Berman, 2018), having a say does not necessarily mean that youth are happier with their living arrangements. Being unhappy,
however, may reinforce their need for control, and exacerbate the consequences of not experiencing it (Cashmore, 2011), which would not contribute to adolescents’ experiences of autonomy in decision-making.

Furthermore, the negotiation and content of living arrangements may also have consequences for adolescents’ third need for relatedness – a sense of belonging and connectedness to parents that provide them the secure base that they need (Ryan & Deci, 2000; Griffin et al., 2017). Compared to their peers from intact families, youth from divorced families are prone to experience a weaker sense of belonging to their families, and research findings indicate that this is partly attributable to group differences in the quantity and quality of their contact with parents (King et al., 2018; Rejaän et al., 2021a). Also, within the group of adolescents from divorced families, there are differences in the extent to which they experience belonging to their maternal and paternal households, at least partially because of the unequal amount of time they typically spend there (Rejaän et al., 2021a). Experiencing autonomy in post-divorce decision-making about living arrangements may help adolescents navigate and maximize their desired time in both households, and thereby may support their sense of family belonging (Birnbaum & Saini, 2013; Lodge & Alexander, 2010). Vice versa, experiencing belongingness may empower adolescents to become proactive in managing their need for autonomy in decision-making (i.e., need crafting; Laporte et al., 2021).

**The Role of Parents in Adolescents’ Post-Divorce Autonomy and Belonging**

Regardless of interrelations between adolescents’ experiences of autonomy and belonging, both are dependent on family support (Neale & Flowerdew, 2007). A broad perspective on the family system is necessary to understand adolescents’ development in divorced families (Cox & Paley, 2003). First, with regard to the parent-adolescent subsystems, a variety of parenting dimensions are likely to play a role. Parents’ child-directed warmth and autonomy support appears of particular relevance in this context (Grolnick et al., 1997; Joussemet et al., 2008). When it comes to the involvement of youth in decision-making processes concerning living arrangements, parents ideally engage in warm and sensitive interactions while acknowledging their children’s perspective, providing choice, and encouraging exploration (Vansteenkiste & Soenens, 2015; Fousiani et al., 2014). Rather than prioritizing their own interests, supportive parents allow or tolerate differences of opinion and ideas, and encourage children regardless (Soenens et al., 2017). This type of parenting by fathers and mothers has been shown to help adolescents in learning to act upon their own interests (Assor, 2012; Fousiani et al., 2014), and presumably applies to youth in divorce situations too. Furthermore, warm and
autonomy supportive parenting helps facilitate parent-adolescent closeness, which is key to adolescents’ family belongingness (King et al., 2018).

In addition to relying on the availability of parents’ individual warmth and autonomy support, adolescents’ autonomy in decision-making and belongingness in both households likely also depends on the coparental relationship (Cox & Paley, 2003; Markham et al., 2017). In the (re)negotiation of living arrangements, interests of parents may collide, and parents are known to make post-divorce decisions based on their own logistical, financial, and relational considerations (Holt, 2016; Russell et al., 2016). Cooperative parents engage in frequent communication and collaboration, and a low level of conflict is most likely to create a supportive environment that promotes both their own and their children's positive adjustment after divorce (Sigal et al., 2011). At the same time, studies have shown that not all parents are able to achieve a cooperative relationship after divorce, as for some, conflicts continue to dominate the relationship (Beckmeyer et al., 2019; Rejaän et al., 2021b). In line with qualitative findings (Berman, 2018), we therefore hypothesize that coparental hostility and uncooperativeness serve as barriers to adolescents’ need-based experiences, while harmony and interparental cooperation are more likely to support it. Ultimately, positive need-based experiences are considered promotive of youngsters’ development, wellbeing, and resilience (Vansteenkiste & Ryan, 2013; Soenens et al., 2017).

The Current Study
Using multi-informant longitudinal data, the current study tested inferences of self-determination theory in the context of parental divorce and separation. Specifically, we examined the extent to which adolescents experienced autonomy in decision-making about living arrangements and belongingness in their post-divorce families, and whether this was predicted by several parenting and coparenting dimensions. Based on SDT and empirical evidence, we hypothesized that higher levels of warm and autonomy supportive parenting, and more cooperative and harmonious coparenting, would be positively associated with adolescents’ post-divorce sense of autonomy and belonging. Autonomy and belonging were expected to be positively associated as well. We explored whether parenting and coparenting longitudinally affected adolescents’ post-divorce sense of autonomy and belonging.

To further our understanding of adolescents’ need-based experiences after divorce, we also examined the relevance of several other characteristics. First, adolescents’ age and the amount of time since the divorce were considered, because youth generally develop better decision-making skills and (desire to) gain more participatory rights within their families as they get older and when more time
since the divorce has passed (Berman, 2018; Neale & Flowerdew, 2007; Palmer et al., 2017). Additionally, we explored whether it mattered if parents were formerly married/in a registered partnership, or were cohabitated, since the former group far more often makes formal living arrangements than the latter group (De Bruijn, 2018).

METHODS

Procedure
This study used self-report data of adolescents and parents from divorced families that were gathered between 2019 and 2022 within the research project Where do I belong, a three-wave study with 9-month intervals. To optimize sample size and heterogeneity, divorced families throughout the Netherlands were recruited in a variety of ways: Through schools, legal and health care professionals, targeted (online) advertisements, and snowball sampling. After receiving detailed information about the study, parents and adolescents each signed online informed consent forms. Respondents individually filled out online questionnaires, taking 40 to 60 minutes, and received a small monetary compensation for their contribution per measurement wave. Families could withdraw their participation at any time during or after participation, without stating reasons. This research protocol was approved by the Faculty Ethics Review Board (FERB) of the Social Sciences Faculty of Utrecht University (Protocol code: FETC18-008).

Sample
The study sample consisted of participants from 146 different families: 191 adolescents (61.3% girls), and 227 parents (74% mothers). Adolescents’ age ranged from 11 to 18 years old at T1 ($M = 14.36$, $SD = 1.89$). The majority (87.8%) attended secondary school: 25% of the adolescents followed the pre-vocational education track, 29.2% the pre-professional track, and 33.5% the pre-academic track. The remaining respondents attended the final year of primary education (3.7%), higher education (7.5%) or no education (1.1%). With regard to their cultural background, 97.4% identified as (partly) Dutch, and most considered themselves non-religious (77.1%) or Christian (16.5%). As for parents, the majority was born in the Netherlands (92.1%), and considered themselves non-religious (60.7%), Christian (32.6%), or other (6.7%). Their age ranged from 34 to 59 years old at T1 ($M = 46.08$, $SD = 5.06$), and highest attained education varied from primary or secondary education (9.6%) to vocational (20.2%), professional (33.1%), or academic education (37.1%), and most parents had a paid job at T1 (92.1%).
Families participated with either one (N = 105 families), two (N = 37) or three adolescent children (N = 4), and with either both parents (N = 40) or one parent. The majority of parents used to be legally married or were in a registered partnership (72.6%), whereas the others were formerly cohabitating. On average, the children were 7.54 years old (SD = 4.06) during the parental divorce or separation, and the time since the divorce during the first wave ranged from 0 to 16 years (M = 6.83, SD = 4.06). Adolescents’ post-divorce living arrangements were measured with the Residential Calendar (Vanasse et al., 2014), which showed that, at T1, adolescents on average spent M = 2.33 (SD = 1.63) days and nights per week in their fathers’ homes, and the remaining time in their mothers’ homes. Based on the time adolescents spent in their parental homes, their living arrangements can be categorized as follows: 21.1% of the adolescents lived solely [100% of the time] with their mother, 27.6% lived mostly [67-99%] with their mother, 46.5% lived a roughly equal amount of time with both parents [33-66%], and some lived mostly (2.7%) or solely (2.2%) with their father.

Out of the initial study participants, 145 adolescents (75.9%), 50 fathers (84.7%) and 132 mothers (78.6%) still participated in the final measurement wave. Adolescents who participated in all three waves reported significantly higher levels of maternal family belonging at T1 (M = 4.33, SD = .58) than adolescents who did not (M = 4.06, SD = .63), t(176) = -2.52, p = .013. Furthermore, mothers who participated in all three waves reported significantly more autonomy support at T1 (M = 3.75, SD = .34) than mothers who did not (M = 3.54, SD = .58). No other differences in background or study variables were found.

As the current study focused on autonomy in decision-making about living arrangements, adolescents were asked whether they currently had arrangements regarding when they resided with their mothers and fathers. At T1, N = 155 adolescents (81.2%) reported having established living arrangements. Adolescents with arrangements had significantly more cooperative coparents (M = 3.63, SD = .93 versus M = 2.90, SD = 1.28), and on average spent more time in their father’s home (i.e., less in their mother’s home) on a weekly basis than their peers without established living arrangements (M = 2.57, SD = 1.54 versus M = .87, SD = 1.36).

Measures
Parent-Reported Warmth and Autonomy Support. Parental warmth towards their children was measured with the Warmth subscale of the Coparenting Behavior Questionnaire (CBQ; Schum & Stolberg, 2007). Mothers and fathers assessed 7 items on a Likert scale ranging from 1 (almost never) to 5 (almost always), such as “I show my child that I care about them”, and “I enjoy spending
time with my child”. Reliability of both maternal and paternal measures were considered good as, respectively, they ranged from $\alpha = .86$ to .88, and from $\alpha = .84$ to .91 across waves.

Parental autonomy support was measured in terms of their tolerance to differences of opinions and ideas towards their children, by using the Balanced Relatedness scale (Shulman et al., 1997). Mothers and fathers assessed 7 items on a Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree), such as “I give my child space to have their own ideas”, and “I take my child’s opinion into account”. Reliability of maternal measures was good ($0.82 \leq \alpha \geq 0.87$) and reliability of paternal measures was acceptable to good ($0.64 \leq \alpha \geq 0.80$).

Per parenting dimension, items were combined into average scores, with higher scores indicating higher levels of warmth and more autonomy support. In families with two participating parents, we used combined scores of father and mother support. Across waves, correlations between maternal and paternal warmth were small and nonsignificant ($-0.15 \leq r \geq 0.04$), and correlations between maternal and paternal autonomy support were also small and mostly nonsignificant ($-0.17 \leq r \geq 0.39$). Scores of parental warmth and autonomy support were weighted by adolescents’ concrete ‘exposure’ to each parents’ parenting, using the categorized living arrangements (see Sample section). This means that weighted scores were composed of either 0%, 25%, 50%, 75% or 100% of mother- and father-reported parenting.

**Parent-Reported Coparental Cooperation and Conflict.** Coparenting dimensions were measured with the Coparenting Behavior Questionnaire, with items on a Likert scale ranging from 1 (almost never) to 5 (almost always; Schum & Stolberg, 2007). Coparental respect and cooperation towards their coparent was measured with the Coparental Respect/Cooperation subscale, consisting of 8 items such as “I want my child to have a good relationship with my ex-partner”, and “My ex-partner helps out when I need to change my child’s schedule”. Reliability was good for mother-reported cooperation ($0.92 \leq \alpha \geq 0.95$) as well as father-reported cooperation ($0.83 \leq \alpha \geq 0.91$).

Parents’ perceived conflict with and hostility towards the other parent was measured with the Coparental Conflict subscale, consisting of 10 items, such as “Me and my ex-partner get angry when we talk to each other”, and “Me and my ex-partner argue in front of our child(ren)”. Conflict measures were also reliable across waves: Mother-reported conflict ($0.75 \leq \alpha \geq 0.89$) and father reported-conflict ($0.89 \leq \alpha \geq 0.90$).
Per coparenting dimension, items in each scale were combined into average scores, with higher scores indicating higher cooperation and higher conflict. Again, we utilized all available parent-report data, using a combined score in families with two participating parents. Because it pertains the coparental subsystem and not the parent-child subsystems, and correlations between mother and father reports were high for both cooperation (.39 ≤ r ≥ .49) and conflict (.83 ≤ r ≥ .85), mother and father reports were averaged into single scores.

**Adolescents’ Sense of Autonomy in Decision-Making.** Each wave, adolescents were asked to indicate whether there were any arrangements regarding their post-divorce living situation (Yes/No). During the first wave, 155 adolescents had established living arrangements, N = 110 in Wave 2 and N = 103 in Wave 3. For adolescents with established living arrangements, there were four items relating to their sense of autonomy in this context: a) Participation in decision-making: “Did you participate in conversations about where you will reside at your father’s or mother’s home?” (1 = no, just my parents, 2 = yes, my parents and I decided together, 3 = yes, it was my decision); b) Importance of opinions: “How important is your opinion about living arrangements to your parents?” (1 = not at all important, 5 = very important); c) Flexibility in arrangements: “Is there room to deviate from established living arrangements in consultation?” (1 = not at all, 5 = very much); and d) Satisfaction with arrangements: “Are you satisfied with the current living arrangements?” (1 = not at all, 5 = very much). To investigate the underlying structure of these four items – whether they indeed measure one dimension – data were analyzed by means of principal component analysis. Each wave, one component with an eigenvalue above 1.0 was identified, explaining between 45% and 57% of the total variance. This indicates that these items can be thought of as representing one underlying factor: Adolescents’ autonomy in decision-making on living arrangements. As such, items were combined into a mean score, with higher values indicating a higher sense of autonomy.

**Adolescents’ Sense of Family Belonging.** Adolescents’ perceptions of family belonging were measured as a mean score of four items, each with five response options (1 = very little, 5 = very much), adapted from King and Boyd (2016), see Rejaän et al. (2021a). Adolescents reported separately on their sense of belonging to each post-divorce household: “How much do you feel your family in your father’s/mother’s home understands you?”, “How much do you feel you and your family in your father’s/mother’s home have fun together?”, “To what extent do you feel your family in your father’s/mother’s home pays attention to you?”, and “How much do you feel you want to leave your father’s/mother’s home? (reversely coded). Reliability of family belonging measures were considered good across
waves, with α ranging from .74 to .77 for maternal belonging, and a consistent α = .87 for paternal belonging. Similar to the parenting measures in this study, and family belonging measures of Rejaän et al. (2021a), a single, weighted score of adolescents’ family belonging was used.

**Strategy of Analyses**

Mplus Version 8.1 (Muthén & Muthén, 1998-2018) was used to run four random intercept cross-lagged panel models (RI-CLPM; Hamaker et al., 2015), assessing associations between (co)parenting, adolescent autonomy in decision-making, and adolescent family belonging for each of the four (co)parenting dimensions separately. All variables had missing data (mostly due to attrition), which – except for adolescent autonomy (see measures) – ranged from 1.3% to 6.8% for T1 variables, from 15.7% to 20.4% for T2 variables, and from 21.5% to 29.3% for T3 variables. Although Little’s missing completely at random test (1988) was significant, the normed chi-square of 1.20 was acceptable (i.e., χ²/df < 2; Bollen, 1989), which implied a small violation of the missing completely at random assumption that could be handled by means of Full Information Maximum Likelihood estimation. Furthermore, since multiple adolescents from the same family were included in the study, which violates the assumption of independence of the data, within-family dependency was accounted for by using the “complex” sample cluster feature in combination with the Maximum Likelihood Robust (MLR) estimator (Muthén & Muthén, 1998-2018).

For each (co)parenting dimension, a separate RI-CLPM was specified. Each RI-CLPM was tested in two steps. First, we fitted a fully unconstrained model, and secondly, a model with time-constraints to stability pathways, cross-lagged pathways, and within wave correlations. Model results were controlled for adolescent age, the amount of time since the divorce or separation, and whether or not parents were formerly married (dummy coded). These covariates were included in the model by regressing the observed scores of (co)parenting dimensions and adolescent outcomes on the covariates. Overall model fit was evaluated with the *comparative fit index* and *Tucker-Lewis Index* (CFI and TLI > .90 = acceptable; > .95 = good fit), the *root-mean-square error of approximation* and the *standardized root-mean-square-residual* (RMSEA and SRMR < .08 = acceptable; < .06 = good fit). To test time-equality constraints, the *Akaike* and *adjusted Bayesian Information Criteria* were compared (lower AIC and aBIC values represent better models), and chi-square difference tests were computed. If the constraints did not worsen fit, they were retained in the model for reasons of parsimony.
## Correlations Between and Descriptive Statistics of All Study Variables

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**Note:** Significant at .05 level. **Significant at .01 level.
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*p ≤ .05, **p ≤ .01. Notes: Variables 1, 2 and 3 are covariates in the Random-Intercept Cross-lagged Panel Models: 1) Adolescent age, 2) Time since divorce, and 3) whether parents were formerly married or not (dummy coded, 0 = previously married, 1 = previously cohabitated). N ranges from 103-188, due to missing data. Superscripts and abbreviations: <sup>A</sup> = Adolescent; <sup>p</sup> = Parental; <sup>c</sup> = Coparental; Auto. Support = Autonomy support.
RESULTS

Table 1 presents the descriptive statistics and bidirectional correlations between all study variables across waves. Table 2 shows the fit indices of the specified random intercept cross-lagged panel models for each (co)parenting dimension. For the coparenting models, the analytical plan could not be executed as intended, as most variance in cooperation and conflict was explained by the random-intercept, and variance in the within-person centered variables was small and not consistently significant. Therefore, alternatively, constrained and unconstrained RI-CLPMs were specified in which coparenting dimensions were solely included at the between-family level. Specifically, random intercepts were created for all variables, the measurement error variances of the observed coparenting variables were kept unconstrained, and within-person centered variables were created only for adolescents' sense of autonomy and belonging.

Table 2
Model Fit Indices for all RI-CLPMs

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</table>

**Notes.** *Adjusted RI-CLPMs with estimates for coparenting variables only at the between-level. Abbreviations:* χ² = Chi-square; df = Degrees of freedom; CFI = Comparative fit index; TLI = Tucker-Lewis index; RMSEA = Root-mean-square error of approximation; SRMR = Standardized root-mean-square residual; AIC = Akaike information criteria; aBIC = Adjusted Bayesian information criteria; p(χ²) = p-value of chi-square difference tests.

All RI-CLPMs had an acceptable fit. The difference in AIC/aBIC between the constrained and unconstrained models was larger than 10 in the parenting models, and larger than 2 in the coparenting models, which together with nonsignificant chi-square difference tests indicated evidence in favor of the constrained models.
(Satorra & Bentler, 2001). The final models for parental warmth and autonomy support are reported in Table 3, which contains four types of effects: between-person correlations, within-person stability effects, within-person cross-lagged effects, and within time associations (correlated change). The final models for coparental cooperation and conflict are presented in Table 4, which due to the model adjustments contains between-person correlations for all variables, and within-person associations and effects solely for adolescent outcomes.

(Co)Parenting, Adolescent Autonomy, and Family Belonging

The associations between the random intercept variables provide information about how stable between-family differences in one variable are associated with those in another variable. All models showed significant positive associations on the between-family level. Adolescents whose parents reported relatively more warmth tended to report a stronger sense of family belonging compared to their peers, but there was no significant association between parental warmth and adolescent autonomy. The results for parental autonomy support showed significant associations between parenting and both adolescent autonomy and belonging, meaning that adolescents whose parents reported relatively more autonomy support tended to self-report stronger autonomy in decision-making as well as a stronger sense of family belonging. Both coparenting models showed significant positive associations among coparenting dimensions and autonomy, but not among coparenting and belonging. This means that divorced parents who were more cooperative and had less conflict with their coparent had children who generally reported more autonomy compared to their peers. Lastly, in all four models, adolescents who reported more autonomy compared to other adolescents tended to also report a stronger sense of belonging. Across models, there were some significant within-family correlated change estimates. That is, the estimates in Tables 3 and 4 consistently showed that adolescent autonomy and belonging were concurrently related at T1, but only in the parental warmth and coparental cooperation model were these variables significantly correlated at subsequent waves. This association suggests that at times when adolescents experienced more autonomy in living arrangement decisions, they also experienced higher belonging. Additionally, the parental warmth model showed correlated change between parental warmth and adolescent belonging, suggesting that belonging was higher at time points when parental warmth was higher. With regard to estimates for within-family cross-lagged effects, there were no significant estimates. So, when parents displayed relatively more warmth, autonomy support, cooperation, or conflict than they usually did, this had no effect on adolescents’ subsequent autonomy or belonging, nor had fluctuations in adolescents’ experiences of autonomy an effect on subsequent belonging or vice versa.
Table 3
Parameter estimates for the constrained RI-CLPMs modelling Parenting with Adolescent Autonomy and Belonging

<table>
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<tr>
<th></th>
<th>Parental warmth</th>
<th>Parental autonomy support</th>
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<tr>
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<td>T2-3</td>
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<td>T3</td>
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<tr>
<td>Autonomy ↔ Belonging</td>
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Notes: Significant estimates are in boldface. Model results are controlled for adolescent age, time since the divorce, and whether or not parents were formerly married (dummy coded, 0 = previously married, 1 = previously cohabitated). *T1-2 and T2-3 paths are constrained to equality.
Table 4
Parameter estimates for the adjusted constrained RI-CLPMs modelling Coparenting with Adolescent Autonomy and Belonging

<table>
<thead>
<tr>
<th></th>
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Notes: Significant estimates are in boldface. Model results are controlled for adolescent age, time since the divorce, and whether or not parents were formerly married (dummy coded, 0 = previously married, 1 = previously cohabitated).
a T1-2 and T2-3 paths are constrained to equality.
All model results were controlled for several covariates. Parents of younger adolescents on average reported more parental warmth at Wave 1 and 2, and more coparental cooperation across waves. Being older predicted more perceived autonomy in living arrangements at Wave 1, and a weaker sense of family belonging across waves. The amount of time since the parent’s divorce or separation positively and significantly predicted parental warmth at Wave 2 and 3. Further, it predicted parent-reported conflicts at Wave 1, in the way that the more time had passed since the divorce, the less coparental conflicts parents reported. Lastly, there was a significant effect of the type of divorce on adolescents’ autonomy at Wave 3, indicating that adolescents whose parents were previously married or in a registered partnership reported more autonomy in living arrangements during the final wave than adolescents whose parents formerly cohabitated. Results of the final models were the same when adolescent age, time since the divorce, and type of divorce were not controlled for.

**DISCUSSION**

This study examined longitudinal associations among (co)parenting dimensions and adolescents’ need-based experiences in the context of a parental divorce or separation. One of the most direct consequences of a divorce is the change from self-evident contact with both parents to diminished and regulated contact via living arrangements, potentially threatening adolescents’ autonomy in decision-making about their living situation, as well as experiences of belonging within the family. Self-determination theory (Ryan & Deci, 2000) poses that whether adolescents adjust positively or negatively to the divorce depends on the supporting or thwarting of these needs, and that the role of parents is paramount in this matter. Specific parenting behaviors have been suggested to be supportive of adolescents’ needs (e.g., Soenens et al., 2017; Grolnick et al., 1997). The current study used random-intercept cross-lagged panel models to test these theoretical inferences, thereby considering both parental and coparental interactions in divorced families (Cox & Paley, 2003), and partitioning between-family differences from within-family effects (Hamaker et al., 2015).

Overall, findings across families indicated that regarding adolescents’ experiences of autonomy, it is important that parents are able to work together, as coparenting dynamics were stronger predictors than parents’ child-directed autonomy supportive behavior. Yet, to experience family belongingness, it is really the relationships with parents within households that count, independent of whether parents cooperate or refrain from conflict. Despite significant findings at the between-family level, hardly no significant associations of (co)parenting with adolescent autonomy and belonging emerged at the within-family level. This
indicates that adolescents growing up in divorced families with less parental warmth and autonomy support, and lower coparental cooperation and more conflict seem to be at higher risk for the thwarting of adolescents’ need for autonomy and belonging. At the same time, however, within-family changes in parenting and coparenting were unrelated to adolescents’ subsequent need-based experiences in this study.

**Autonomy in Decision-Making on Living Arrangements**
Across families, adolescents who experienced a stronger sense of autonomy typically had parents who indicated being more tolerant of their children having different opinions and ideas, and who managed to interact more cooperatively and harmoniously towards their coparent. Whereas these findings regarding the role of parental autonomy support are clearly in line with theoretical expectations – it is the *parenting* dimension that is most unique and most central to SDT (Ryan & Deci, 2000) – the findings of this study add to existing literature by also demonstrating the importance of *coparenting* dynamics for adolescent autonomy post-divorce. It is considered beneficial for youth when both parents after divorce are positively involved in their children’s lives within the context of cooperative and harmonious coparental relationships (Cox & Paley, 2003; Minuchin, 1974), as for instance has been found in relation to adolescent adjustment (Amato et al., 2011; Rejaän et al., 2021b). This study suggests that applies to adolescents’ divorce-specific sense of autonomy as well, where the collaboration between parents appears a prerequisite for involving adolescents in decisions, or where conflicts between parents hinder adolescents’ sense of agency and influence in family decisions, as was suggested based on qualitative research (see Berman, 2018 for a review).

**Family Belonging**
Although coparenting dynamics were also expected to be associated with adolescents’ experiences of belonging, results showed that parenting dynamics were more important: Adolescents with a stronger sense of belonging generally had parents who displayed more warmth and were more autonomy supportive. These findings are in line with theoretical notions of how the combination of warmth and autonomy support can give rise to the harmonious satisfaction of needs (Soenens et al., 2017). Additionally, they correspond with prior research that suggested the quality and closeness of parent-adolescent relationships to be the most important predictor of adolescents’ family belonging (King & Boyd, 2016; King et al., 2018). After all, belongingness pertains to how adolescents feel accepted and understood in their parental household(s) (Leake, 2007). Even though coparental cooperation and lack of conflict may not contribute to adolescents’ belonging to maternal and paternal households in the most direct sense, these factors have been shown to
strenthen parents’ abilities to shape their parenthood within their own households (e.g., Adamsons & Pasley, 2006; Feinberg, 2003), and could have therefore transferred over to adolescents’ belongingness as well. However, in the current study, associations between coparenting and parenting were weak and only (inconsistently) significant for interparental conflict. Whether the coparental relationships is characterized by cooperation or conflict, our findings indicated that adolescents can experience family belonging regardless.

A Matter of Stable Between-Family Differences
In contrast to hypotheses derived from self-determination theory (Ryan & Deci, 2000), the current study did not provide evidence for any longitudinal effects of (co)parental thwarts or supports on adolescents’ need-based experiences. Put differently, the links between (co)parenting and adolescent autonomy and belonging appeared to be a matter of stable differences between participating families, not of within-family processes in which adolescents and parent(s) prompted fluctuations in each other’s experiences or behaviors. Still, the absence of within-family effects in this study does not rule out that such effects were present prior to families’ participation in this research or before participants entered adolescence (Vrolijk et al., 2020; Van Lissa & Keizer, 2020). The covariates in our models, for example, provided some insights into certain developmental trends. In line with developmental expectations (Deci & Vansteenkiste, 2004), parents tended to display more warmth and cooperation when their children were younger, while younger adolescents tended to experience more belonging and less autonomy. Also, the more time had passed since the divorce, conflicts between parents had generally decreased, while parental warmth increased. Thus, it could be that throughout the history of parental and coparental interactions, stable interaction patterns have been formed. This particularly seems to apply to coparental dynamics, where there was little within-family variance, perhaps because in many families the divorce had taken place years ago. Prior research showed that the reorganization of the coparental relationship typically takes time, but eventually becomes more stable (Fischer et al., 2005; Jamison et al., 2014). While our findings indicate that some families have been able to develop a good working mode, it also means that other families have developed rather rigid and problematic interaction patterns, which may be difficult to tackle.

Autonomy and Belonging
Adolescents’ autonomy and belonging were also hypothesized to be interrelated. When adolescents experience volition with respect to their living situation, this can help them feel included and understood within the family (Birnbaum & Saini, 2013; Lodge & Alexander, 2010). Also, in a supportive environment, adolescents may be
more comfortable with expressing their views on current or desired living arrangements (Berman, 2018; Neale & Flowerdew, 2007). Indeed, findings showed that adolescents who on average experienced more autonomy regarding their living arrangements also tended to report a stronger sense of family belonging. Additionally, even though findings were not consistent, two out of four models indicated that individual fluctuations in adolescents’ autonomy and belonging were also related within measurement waves. This means that when adolescents reported relatively more autonomy than they typically experienced, they also reported relatively more belongingness at that time.

**Limitations and Directions for Future Research**

Naturally, this study comes with several limitations that have to be taken into account when interpreting its findings. Even though we gave due consideration to the use of self-reports, the use of cross-reports would have resulted in insights into potential discrepancies in parents’ and adolescents’ perceptions of (co)parenting (see Korelitz & Garber, 2016). Furthermore, the fact that father-reports were only available for a third of the participating adolescents at T1 resulted in the merging of father and mother data into single scores. Ideally, adolescent outcomes are tested in relation to fathers’ and mothers’ (co)parenting separately, since we know that there can be substantial variations in their parenting and coparenting behaviors that are not taken into account in the current study (e.g., Russell et al., 2016; Vrolijk et al., 2020). Regarding the measurement of adolescents’ autonomy in terms of their living situation, a limitation was that items were only presented to adolescents who indicated that there were established living arrangements in their divorced families. This means that our findings are not applicable to adolescents from families where there are no formal or explicit agreements about the arrangement of care and contact, while also for these adolescents, a certain sense of autonomy in living arrangements is relevant and desirable.

In addition to the methodological directions for future research that can be derived from the limitations of this study, the results particularly raise the question of what family- or adolescent-factors can strengthen their sense of autonomy and belonging when growing up in a divorced or separated family. Perhaps even more specific measures are needed for disentangling within-family effects from between-family differences, for example by tailoring questions with regard to parental belongingness support (e.g., respect and warmth), competence support (e.g., offering clear expectations and adequate help), and autonomy support (e.g., providing choice and encouraging exploration) to divorce-specific situations, or studying links between (co)parenting and adolescents’ need-based experiences during transitional periods. Alternatively, an innovative perspective has recently
been introduced: the notion of need crafting (Laporte et al., 2021). Rather than being solely dependent on supportive environments, need crafting entails awareness of one’s personal resources for need satisfaction as well as a tendency to act upon this awareness, for instance by reflecting on who you are as a person and what is important to you, and committing to act upon these reflections. The first psychometric results are certainly promising for studying adolescents’ post-divorce needs, and show significant associations with (mal)adjustment at both the between- and within-person level, indicating that need crafting is susceptible to change, and therefore potentially valuable for intervention or prevention (Laporte et al., 2021).

**Conclusions and Practical Implications**

The between-family associations in the current study mainly showed that the family is an important context for adolescent functioning post-divorce, where some adolescents are protected from the risk of maladjustment to a greater extent than others, based on whether mothers and fathers engage in warm and supportive parenting, and have formed a coparental relationship characterized by cooperation and low conflict. Particularly, adolescents’ autonomy seems better safeguarded when parents have established a cooperative relationship, whereas ensuring adolescents’ belongingness in parental households is up to parents individually. Further, the absence of within-family associations revealed that parents and adolescents in this study, after spending an average of about 6 to 7 years as a divorced family, did not mutually influence each other’s behavior or experiences over the course of this 18 month-study. Two important insights should be derived from this finding. First, with respect to parenting, it suggests that when parents displayed more warmth or autonomy support than usual, adolescents’ did not experience an increase in their sense of autonomy or belonging. Conversely, and perhaps more importantly, even if parents temporarily showed diminished parenting this did not have immediate negative consequences for adolescents’ need-based experiences. Second, the absence of within-family longitudinal associations in this study does not mean that if divorced parents were to receive any form of (professional) support related to parenting or coparenting, this would not benefit their children. It only showed that such change did not occur in these families in their natural setting.
CHAPTER 7

Summary and General Discussion
The general purpose of this dissertation was to advance our understanding of adolescents’ sense of belonging when growing up in two homes after a parental divorce or separation. To this end, the first aim was to study adolescents’ sense of belonging after divorce in key social contexts, namely the family, school, peer group, and neighborhood(s), as well as its associations with their adjustment. The second aim was to examine adolescents’ experiences of belonging within the divorced family system, as a function of dynamics occurring in the father-adolescent, mother-adolescent, and coparental subsystem. This concluding chapter includes a summary of the findings in relation to the aims of this dissertation (see also Table 1 below), and an overarching discussion of the key findings and their implications.

**AIM 1. ADOLESCENTS’ POST-DIVORCE BELONGING AND ADJUSTMENT**

As an introduction and theoretical embedding to the empirical studies in this dissertation, Chapter 2 presented a literature review on adolescents’ sense of post-divorce belonging. Based on theoretical and empirical evidence from various scientific disciplines, it was proposed that experiencing a sense of belonging might be a challenging, yet important task for adolescents growing up after a parental divorce. Furthermore, it described what factors and mechanisms are expected to affect post-divorce belonging in different contexts. With the family being the primary context for belongingness, a divorce disrupts experiences of belonging that might have come natural to adolescents prior to the divorce. The three main and direct stressors in this regard are reduced contact with either one or both parents and the contact and care arrangement (Adamsons & Johnson, 2013; Baude et al., 2016), the reorganization of parents’ roles as coparents, potentially hindered by frequent and intense conflicts (Amato, 2010; Lansford, 2009), and diminished parenting and lower quality parent-child relationships due to the compromised energy of parents and so-called spill-over effects (Hetherington, 2006; Van Dijk et al., 2020). Not only are these stressors regarded risk factors for adolescents’ family belonging, they may also indirectly affect experiences of peer-, school-, and neighborhood belonging, for instance due to divorce-related stress or social-emotional problems in adolescents (Amato, 2010; Lansford, 2009), lower availability of financial resources (e.g., Haermans et al., 2014), and practical-logistical and relational issues due to moves or geographical distance between residences (Haugen, 2010; Ottosen et al., 2011). On the other hand, non-familial contexts might also provide adolescents with unique opportunities for support and belongingness (Allen et al., 2018; McGraw et al., 2008). The literature review concluded that more knowledge about the factors that affect the sense of belonging of adolescents in divorced families can be an important next step in promoting a higher quality of life for adolescents after parental divorce.
Belonging in Intact and Divorced Families

The cross-sectional study in Chapter 3 was the first to comprehensively examine the role of family structure in adolescents’ sense of family, peer-, school-, and neighborhood belonging. In a secondary-school-cohort, it was tested whether the level of belonging and associations among belonging and adolescent wellbeing and problem behavior differed between adolescents from intact and divorced families. Overall, this study demonstrated that a parental divorce can affect adolescents’ belonging until years after the initial separation. Most importantly, and in line with prior research (Cavanagh, 2008; King et al., 2018), adolescents from divorced families reported lower family belonging than their peers from intact families, even after controlling for the quality of relationships with mothers and fathers, and for the level of conflict between parents. The stability of living with both biological parents may thus yield advantages for adolescents’ belonging that go beyond the quality of family relationships.

In line with our previously presented hypotheses, adolescents’ school belonging was associated with the quality of adolescents’ relationships with parents and with the coparental relationship, and was therefore on average lower in adolescents from divorced families. However, levels of peer belonging did not differ, and interestingly, adolescents from divorced families experienced stronger belonging to the neighborhood(s) they resided in than their peers from intact families. It seems that adolescents from divorced families generally have rather positive experiences with friendships and activities in their neighborhoods. As such, it appeared that non-familial contexts were more likely to have a protective function rather than to present an additional risk for adolescents after divorce.

Adolescent Belonging and Adjustment

Chapter 3 further showed that, across social contexts, stronger belongingness was generally predictive of higher subjective wellbeing in adolescents, and lower internalizing and externalizing problems. The strength of associations did not vary based on family structure, indicating that a stronger sense of family belonging, for example, does not seem to offer more benefits for adolescents in intact families, nor does it pose a greater risk for youth after divorce. In relative terms, the family appeared the most important social context for adolescent wellbeing, while belonging to the peer group and school most strongly predicted internalizing and externalizing problems, respectively. Contrary to expectations (Law et al., 2013; Witherspoon et al., 2009), the findings did not indicate that a lower sense of belonging to one context could be compensated by stronger belongingness to another. Lastly, results indicated that lower belonging after divorce, mostly to the family, partially accounted for family structure-based differences in adjustment.
AIM 2. POST-DIVORCE FAMILY DYNAMICS AND ADOLESCENTS’ FAMILY BELONGING

Family Belonging in Divorced Families
The second aim of this dissertation was to identify factors that account for individual differences in adolescents’ family belonging after divorce. The literature review in Chapter 2 pointed to the interconnected roles of three family dynamics in adolescents’ sense of belonging after divorce. Firstly, it concerned the coparental relationship, where ex-partners face the task to restructure their parenting partnership that allows their children to adjust positively to the divorce, and to experience belongingness to both parental households (Adamsons & Pasley, 2006; Amato et al., 2011). Secondly, it regarded the arrangement of care and contact, as contact is a prerequisite for belongingness, but is co-determined by factors from different systemic levels, such as contact prior to the divorce (Poortman, 2018), parents’ financial and employment situation and geographical distance between residences (Poortman & Van Gaalen, 2017; Bakker & Mulder, 2013), and in the broadest sense, the law, which prescribes what arrangements must formally be made, and how youth should be involved in such decision-making processes. Thirdly, it concerned the quality of adolescents’ relationships with mothers and fathers, which are also subject to reorganization after divorce and are key predictors of adolescents’ family belonging (King et al., 2018).

The interrelatedness of these three dynamics also came to light in Chapter 3, where we explicitly examined adolescents’ sense of belonging to paternal and maternal households after divorce. This study revealed that the quality of relationships as well as family belonging were lower for fathers than for mothers, and levels of maternal family belonging resembled those of adolescents from intact families much more closely than levels of paternal family belonging. Moreover, belonging to fathers’ homes was more strongly associated with the amount of father-adolescent contact, and with the level of conflicts between parents. These differences in father and mother belongingness may be an important underlying factor in explaining interindividual variability in adolescent adjustment post-divorce, and thus require more research into their determinants. Guided by these findings, the remaining chapters more closely examined the dynamics occurring in the coparental and parent-adolescent subsystems.

Coparenting in Divorced Families
The cross-sectional study in Chapter 4 focused on aspects of the coparental relationship, namely the extent to which parents engaged in communication, cooperation, conflict, and triangulation after divorce. It aimed to extend prior research by studying patterns of behavior in a holistic manner and from the
perspective of adolescents instead of parents. Linking coparenting behaviors as perceived by adolescents with self-reported adjustment outcomes was the second aim of this study. Four distinct post-divorce coparenting patterns were identified in our sample, which were quite comparable to those identified in previous studies relying on parent reports. A cooperative pattern emerged among about a third of the sample (Ahrons, 1994; Amato et al., 2011; Maccoby et al., 1990), which was characterized by relatively high levels of communication and cooperation, and low levels of conflict and triangulation. As expected, adolescents with cooperative parents reported the least amount of internalizing and externalizing problem behavior. Further, a negatively engaged and negatively disengaged pattern were identified, which were similar in their relatively high amount of conflict and triangulation, but differed in how they were accompanied with communication and cooperation. Given the higher risk of exposure to conflicts between parents, adolescents in the negatively engaged group reported the highest level of internalizing problems (Elam et al., 2019; Kalmijn, 2016; Lamela et al., 2016). The negatively disengaged pattern mostly resembled a so called parallel pattern in which parents appeared not exactly on good terms, but had little contact (Amato et al., 2011). The largest group of adolescents belonged to an average pattern, which was not clearly positive, negative, or mixed in nature, but scored rather average on all coparenting dimensions.

Parent-Adolescent Contact in Divorced Families

Chapter 5 presented a study on the quantity and quality of adolescents’ contact with parents after divorce, taking into account the time adolescents spent in each household (i.e., residential contact), as well as their online messages, phone calls, and video calls during times spent apart from a parent (i.e., digital contact). On a descriptive level, it showed that adolescents regularly engaged in digital contact with the parent they were not residing with, but there were some differences between fathers and mothers. It appears that adolescents used digital media as a transitional tool with fathers – a way of bridging times spend together in real life (Saini et al., 2013). However, the more time adolescents spent in their mothers’ homes, the less time they engaged in digital contact, indicating that the desire for additional contact may be less when adolescents already spend most of their time with mothers. Also interesting in this respect was the finding that the general quality of adolescents’ relationship with mothers was not related to their residential time together, and that other associations between the quantity and quality of digital and residential contact seemed stronger for fathers, and therefore potentially more important for fathers than mothers. Furthermore, cross-lagged associations suggested that higher-quality contact between adolescents and parents facilitated positive changes over time, such as stronger overall
relationships with fathers, more digital contact with mothers, and stronger digital relationships with mothers. These findings are in line with prior evidence that contact quantity and quality after divorce are strongly interrelated (Bastaits & Pasteels, 2019; Sobolewski & King, 2005). Lastly, the results did not support the hypothesis that digital media could be a tool for promoting adolescents’ sense of paternal or maternal family belonging after divorce, as more contact positively perceived digital contact did not uniquely contribute to family belonging over time over and above the effect of relational quality. Similar to prior studies (King et al., 2016; 2018), the closeness of relationships with parents emerged as the strongest predictor of family belonging.

(Co)Parenting and Adolescent Autonomy and Belonging in Divorced Families Chapter 6 focused on adolescents’ sense of autonomy in decision-making about living arrangements after divorce. Self-determination theory (Ryan & Deci, 2000) considers autonomy a need-based experience that is equally important for adolescents’ psychosocial functioning as belongingness. Specifically, this longitudinal study examined whether parent-reported warm and supportive parenting interactions, and their cooperative and harmonious coparenting interactions promoted adolescents’ self-reported autonomy in decision-making and family belonging after divorce.

Adolescents who on average reported a stronger sense of autonomy in decision-making typically had parents who indicated being more tolerant of their children having different opinions and ideas, and moreover, who managed to interact more cooperatively and harmoniously towards their coparent. Adolescents who on average reported a stronger sense of family belonging generally had parents who reported more warmth and autonomy supportive parenting. Interestingly, these findings suggest that adolescents’ autonomy in decision-making seems better safeguarded when parents are cooperative and refrain from conflict, whereas their belongingness in parental households is up to each parent’s parenting itself, independent of the coparental relationship. Additionally, the results showed that adolescents who reported more autonomy tended to also report stronger belongingness. In contrast to expectations, we found no evidence for any longitudinal effect of parental or coparental supports or thwarts on adolescents’ need-based experiences. In other words, the identified links between (co)parenting and adolescent autonomy and belonging appeared to be predominantly a matter of stable differences between participating families, that have likely been formed over the 6 to 7 years that they on average have spent as a divorced family. During the course of this study, however, parents and adolescents did not mutually influence each other’s need-based experiences and (co)parenting behaviors.
Table 1
Summary of Main Empirical Findings

CHAPTER 3

- Adolescents from divorced families on average experienced a weaker sense of family belonging, and a stronger sense of neighborhood belonging compared to their peers from intact families.
- Belongingness in the peer group did not differ based on family structure, and differences in school belonging were linked to differences in interparental conflict and parent-adolescent relationship quality, to the disadvantage of adolescents from divorced families.
- After a divorce, adolescents generally experienced stronger maternal family and neighborhood belonging than paternal family and neighborhood belonging.
- Regardless of family structure, adolescents' belongingness significantly and positively predicted their wellbeing and problem behavior.
- Belongingness partially mediated the association between family structure and adolescent adjustment.

CHAPTER 4

- Based on adolescent-reported coparenting conflict, communication, respect & cooperation, and triangulation, four distinct post-divorce coparenting patterns were identified: cooperative, negatively engaged, negatively disengaged, and average.
- Adolescents with cooperative coparents reported the least internalizing and externalizing problems, whereas those with negatively engaged reported the most internalizing problems.
- After controlling for the quantity and quality of adolescents' contact with both parents, differences in adolescent adjustment based on coparenting patterns remained significant.

CHAPTER 5

- Adolescents regularly used digital media to communicate with fathers when residing with mothers, and vice versa. More frequent residential contact with fathers related to more frequent digital contact with fathers, whereas more frequent residential contact with mothers related to less digital contact with mothers.
- The quantity and quality of adolescents' residential and digital contact with parents were mostly positively concurrently interrelated.
- Higher quality interactions with parents facilitated positive changes in parent-adolescent contact over time, though differently for fathers and mothers. Most importantly, higher quality digital interactions facilitated higher quality father-adolescent relationships.
- Digital media use after divorce did not uniquely contribute to adolescents’ family belonging over time. The quality of adolescents' relationships with fathers and mothers was most important in predicting paternal and maternal family belonging.

CHAPTER 6

- The majority of adolescents in our sample had established living arrangements, i.e., agreements as to when they reside with their mothers and fathers.
- On the between-family level, adolescents with a stronger sense of autonomy in decision-making generally had parents who were more autonomy supportive, and more cooperative and harmonious towards their coparent. Adolescents with a stronger sense of family belonging generally had parents who displayed more warmth and autonomy support.
- On the within-family level, there were no significant lagged associations among parenting or coparenting and adolescents' autonomy or belonging.
KEY FINDINGS AND IMPLICATIONS FOR RESEARCH AND PRACTICE

Growing up in a divorced family poses a risk factor for adolescents’ sense of belonging

This dissertation showed that growing up in a divorced family is negatively associated with adolescents’ experiences of belonging, and that this belongingness in turn was predictive of their adjustment. Specifically, adolescents’ sense of belonging to the family and school context were lower compared to that of their peers from intact families, which ultimately related to a diminished wellbeing and increased externalizing problems. The family structure-based differences in adolescents’ school belonging turned out to be related to the quality of post-divorce relationships with and between parents, which have also been linked to lower school engagement and academic functioning in prior research (Bowen et al., 2008; Dee & West, 2011). Although adolescents’ family belonging was also related to these family dynamics, our findings indicated that the instability of growing up in a divorced family has disadvantages for adolescents that go beyond the quality of individual family relationships, in line with family systems theory. Other studies have suggested that the constant physical absence of one of the parents after a divorce, for different reasons, may erode previously unambiguous definitions of what family entails for adolescents, and therefore how they evaluate their belonging within the family (Aslantürk & Mavili, 2020; Nakhir & Kutsar, 2022).

Throughout this dissertation, a novel approach was used to examine adolescents’ family belonging after divorce. Where prior studies opted to only consider the ‘primary’ home of adolescents (Cavanagh, 2008; Leake, 2007; King et al., 2018), we explicitly took into account both father and mother households, better suited to the current number of shared residence arrangements in many Western countries (Poortman & Van Gaalen, 2017; Steinbach & Augustijn, 2020). This not only allowed us to compare adolescents’ belonging among divorced households, but also to compare their sense of family belonging more fairly with that of peers from intact families. Furthermore, it speaks to the reliability of our measures as well as our findings that reports of maternal and paternal belonging were equal to the decimal in two different post-divorce samples, where one was more representative in terms of the general Dutch population (Chapter 3), and the other was more representative in terms of those growing up in two homes (rather than with mothers) (Chapters 5 and 6). Taken together, this dissertation provided more robust evidence for the risk that a parental divorce poses on adolescents’ family belonging.

This dissertation did not find evidence for the so-called substitution hypothesis, which presumed that a lack of connection to one context, such as the divorced family, perhaps could be compensated by strong connections to another context,
such as the peer group (Costa et al., 2005; Witherspoon et al., 2009). Such a finding would provide clear goals for educational or community programs targeting youth in general, and for those after divorce specifically. The absence of interaction effects in this study does not rule out the existence of substitution effects, since they could be present in a more problematic divorce sample. Future research could use a person-centered approach, which is more suitable to find patterns of belonging across adolescents, considering both the contexts of belonging (e.g., family and peers) and the quantity of contexts to which they experience relatively strong belonging (i.e., one or more). For now, it seems research should focus on factors that could strengthen adolescents’ belonging to the family context, especially since the findings from this dissertation suggest that levels of family belonging do not increase or recover over time, while they are evidently promotive of adolescent adjustment. Particularly, the quality of relationships with parents appear to require extra care during and after a divorce.

**There are inherent differences in the parental roles of fathers and mothers after divorce**

What clearly emerged from the results of this dissertation were the differences between fathers and mothers after divorce, which were present in every part of this research. Starting with the underlying reason for studying adolescents’ belonging when growing up in two homes, there is a decreasing, yet still considerable difference in the amount of time children after divorce spend with each parent. That is, although parents increasingly strive for a more equal division of parenting tasks, such as a greater role of fathers in the care and upbringing of children, it is still most common for children to live with their mother and have regular contact with their father (Bakker & Mulder, 2012; Poortman & Van Gaalen, 2017). The diversity in post-divorce living arrangements is reflected in all samples that were studied in this dissertation, and we have taken those variations into account by examining father-adolescent and mother-adolescent dynamics separately or by using scores weighted by living arrangements. Yet, differences between fathers and mothers remain evident, and these differences also impacted several other family dynamics post-divorce.

This dissertation showed that adolescents growing up in divorced families experience lower levels of belonging to fathers’ family and neighborhood, and generally lower quality relationships with fathers than mothers, as indicated by parental warmth, parent-adolescent communication, parental involvement or monitoring, and feelings of closeness and support relating to digital contact. This difference between the quality of relationships with fathers and mothers appears larger in divorced than in intact families, which is in line with prior research.
suggesting that a divorce increases inequality between children’s relationships with fathers and mothers, to the detriment of children’s relationships with fathers (Kalmijn, 2013). However, differences in means should not be confused with differences in importance. As indicated by the associations between weighted scores of post-divorce family belonging and adolescent adjustment, a strong sense of belonging in parental households is important for adolescents, regardless of whether they reside in paternal or maternal households or both.

Furthermore, mean-level differences in the quality of father and mother relationships are not necessarily a reason for concern, given that they can also be a manifestation of their differential roles as parents. For example, traditionally, fathers more often provide limits and autonomy support, and mothers generally offer more comfort and emotional support, both in intact and in divorced families (e.g., Smetana et al., 2006; Lamb, 2004). At the same time it should be noted that this more conventional division of parenting roles stems from times when fathers spent much less time with their children than mothers. In that sense, divorce research has only recently shifted focus from studying ‘father absence’ to ‘father involvement’ after divorce. This shift has been attributed to secular changes, particularly in economic circumstances and maternal employment, as well as to critiques of traditional social structures and gender roles (Lamb, 2004). It is reasonable to assume that the changing societal norms linked to more equality of parents’ roles in care and contact after divorce today, will eventually also lead to more uniform roles of fathers and mothers. Moreover, frequent residential contact, including overnight stays, gives both parents the opportunity to take on ‘traditional mother’ and ‘traditional father’ tasks. Given these ongoing societal changes, it may be too early to expect mean-level equality in parents’ roles at this time. For now, the findings in this dissertation demonstrate the significant presence of fathers in the upbringing of adolescent children in terms of contact quantity. In addition, recent findings showed that fathers in shared residence arrangements are more engaged in different types of care (e.g., daily practical care, leisure activities, and occasional care) than those in non-shared arrangements (Koster et al., 2020). Future research will have to show whether and how the roles of fathers and mothers develop over time, parallel to societal change in father and mother roles.

**Strengthening adolescents’ family belonging after divorce: Easier said than done?**

Theoretically, the two criteria for belongingness entailed that interactions between adolescents and their parents have to be frequent and free from conflict, and that these interactions would be perceived as part of an affective bond, marked by stability and continuation into the foreseeable future (Baumeister & Leary, 1995).
Based on family systems theory, we expected that the stressful circumstances surrounding a divorce (e.g., conflicts between parents, diminished (co)parenting and reduced contact) would make it challenging for parents to meet these criteria during the initial aftermath of a divorce. But, eventually, new and positive patterns were expected to emerge as an adaptation to the family’s changed circumstances (Cox & Paley, 2003). Our findings indeed demonstrate that quite stable family dynamics have been formed during the years following the divorce, yet adolescents’ sense of family belonging on average remains weaker in comparison to that of peers from intact families. Moreover, adolescents’ sense of belonging in paternal households remains more vulnerable relative to their belonging in maternal households. Overall, the results of this dissertation mainly indicate that adolescents after divorce will likely benefit from experiencing stronger belongingness to the household(s) in which they reside, but that this belongingness is not as directly susceptible to change as might be expected based on these theoretical criteria.

Examination of post-divorce family dynamics showed that adolescents’ belonging in paternal households appears to depend more strongly on the amount of residential time with fathers, than that maternal belonging depends on residential time with mothers. Put differently, it seems that maternal belonging is generally better safeguarded or more self-evident because of common post-divorce living arrangements. Mothers often retain their greater role in children’s upbringing, while fathers are more often challenged to reorganize their parenting in order to enact responsibilities that were once met by mothers or both parents together within the same household (Russell et al., 2017). Ensuring a minimum or ‘sufficient’ amount of contact after divorce to maintain or rebuild relationships therefore appears more crucial for fathers than for mothers (Fabricius et al., 2012; Kalmijn, 2015). One strategy that was examined in this dissertation was to facilitate father-adolescent contact via digital media. Even though digital contact did not affect adolescents’ perceptions of family belonging directly, findings did indicate that when adolescents experienced digital contact more positively, they generally reported a stronger relationship with fathers at a later time. Furthermore, across families, we found that parents who generally tended to display more warmth and autonomy support, had children who on average reported higher levels of family belonging. Thus, if families in which adolescents experience lower belonging were to invest in higher quality contact, for example through more shared activities between adolescents and fathers, perhaps this may have positive effects on adolescents’ paternal family belonging over time after all.

Some father and mother differences found and discussed in this dissertation may also be partly caused or sustained by so-called gatekeeping behavior of mothers.
That is, mothers can play a restrictive or facilitative role in fathers’ contact and involvement after divorce, through their beliefs and behaviors regarding the role of the father in their children’s lives (Kline Pruett et al., 2016). This can play a critical role in the negotiation of post-divorce living arrangements, especially when parents’ division of tasks and involvement in childrearing were skewed in gender-typical ways prior to the divorce (Antokolskaia et al., 2019; Kline Pruett et al., 2007). Gatekeeping can also be negative and restrictive, and may interfere with children’s relationship with fathers after arrangements have been made. One example is being overly rigid in parenting plan arrangements to limit father-child time together, which more often occurs in high conflict situations. Contrarily, gatekeeping can be positive and adaptive when it is focused on facilitating children’s contact with fathers, for example by acknowledging fathers’ strengths and speaking positively about them, being flexible and accommodating in care and contact arrangements, and allowing and supporting children to (digitally) contact their fathers (Ganong et al., 2012; Saini et al., 2017). This strategy for strengthening contact thus entails a clear role for mothers with whom adolescents’ contact is more self-evident, and might even promote belongingness to the father.

The concept of gatekeeping also relates to coparenting behaviors examined in this dissertation, where parents’ mutual respect and cooperation was linked to lower adjustment problems and higher perceived autonomy in adolescents. In contrast, parental conflicts related to higher adjustment problems and lower perceived autonomy. Yet, links between coparenting dynamics and adolescents’ belonging did not clearly emerge in this dissertation. In fact, our findings suggested that a positive post-divorce coparental relationship is not a prerequisite for adolescents’ experiences of family belonging in the two households. Instead, cooperative and harmonious coparenting appeared facilitative of adolescents’ experiences of autonomy – a need-based experience that goes hand in hand with belongingness, and that is also promotive of adolescent adjustment. Moreover, autonomy is a need that is considered particularly important during adolescence, when children increasingly want more personal freedom in forming and expressing their wishes and opinions (Deci & Vansteenkiste, 2004; Smetana et al., 2005). This often requires adaptation from adolescents’ families, and temporary decreases in positive family functioning during adolescence are not uncommon in families in general (De Goede et al., 2009). Thus, where adolescents growing up in two homes after divorce have the particularly challenging task of developing a balance between autonomy and belonging in relationships, their parents are presented the parallel task of developing a balance between involvement and collaboration in the coparental relationship, and involvement through warm and supportive child-directed interactions in their individual households.
There is more to learn about adolescents’ sense of belonging after divorce
The current dissertation also raises new questions with regard to the links between family dynamics, adolescents’ sense of belonging, and their adjustment after divorce. The findings in this dissertation are based on samples after divorce that were homogeneous in terms of their cultural background, and generally well-functioning, hence it would be important to examine whether they could be replicated in more heterogeneous or more targeted samples. This could for instance provide insight into the role of fathers and mothers in adolescents’ sense of belonging across different cultures, the mechanisms through stepfamily members either facilitate or hinder adolescents’ belonging, or the implications of frequent and intense conflicts between parents or loss of contact with one parent for adolescents’ sense of belonging. Furthermore, as was argued in the literature review in Chapter 2, more benefits can be gained from combining expertise from different scientific disciplines, for example by examining factors that operate at broader levels, such as the geographical distance between parental homes, the role of societal norms in parents’ opinions about how care and contact should be arranged after divorce, or whether and how youth participation in divorce-related proceedings affects their sense of belonging and adjustment after divorce. A final important direction for future research concerns the combination or triangulation of research methods. A new and upcoming quantitative method is the use of daily diary assessments, which can be used to examine short-term processes relating to belongingness as they unfold in adolescents’ daily lives after divorce, for instance depending on whether they stay with their father or mother, or make a transition between parental homes. As for qualitative methods, classic semi-structured interviews or go-along-interviews used in human geography research could provide new insight into more personal perspectives on the meaning of home and belonging for adolescents from divorced families. In sum, there is more to learn about the generalizability of the findings in this dissertation, about the factors that play a role in adolescents’ sense of belonging beyond family dynamics, and about how other research methods can enrich our understanding of adolescents’ post-divorce belonging.

CONCLUDING REMARKS

This dissertation set out to further our understanding of adolescents’ sense of belonging when growing up in two homes. Several key findings stood out. First, a parental divorce has negative effects on adolescents’ sense of belonging that remain visible until years after the initial separation. This mostly concerns their belongingness to the family system, which is an important predictor of adolescent adjustment, both in intact and divorced families. Second, adolescents’ belonging to paternal households is more vulnerable than their sense of belonging to maternal
households after divorce, which appears to be influenced and sustained by societal norms and practices pertaining to how fathers and mothers negotiate and arrange care and contact after a parental divorce. Thirdly, it appears that promoting adolescents’ belongingness after divorce requires commitment and proactivity across family subsystems, and so a strong sense of belonging in adolescents from divorced families should not be taken for granted. Moreover, it should be noted that the findings in this dissertation rely on the reports of adolescents and parents from relatively harmonious divorced households in which stable and mostly positive interaction patterns have formed over the years. Hence, when such stable patterns do not emerge or do not become more positive in divorced families over time, this should be considered an indication for these families needing professional help. The findings in this dissertation mainly suggest that clinical and legal practitioners working with divorced families should a) assist families in the continuation of contact with fathers after divorce – immediately after a divorce, but also in the years that follow; b) inform mothers about the facilitative role they can play in fathers’ contact with children, either implicitly or explicitly; and c) encourage divorced parents to cooperate, or alternatively, to try and limit children’s exposure to their conflict. Ultimately, optimizing adolescents’ sense of belonging after divorce is worthwhile, because youth who feel at home experience fewer problems and higher wellbeing. Research and practice should strive to grant them the best of both homes.
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SAMENVATTING

De meeste kinderen in Westerse landen worden geboren in een traditioneel twee-ouder gezin. Voor een aanzienlijk deel verandert die gezinsstructuur gedurende hun jeugd als gevolg van een ouderlijke scheiding. In Nederland is dit van toepassing op ruim 86.000 kinderen per jaar, en volgens schattingen van het Centraal Bureau voor de Statistiek woont ongeveer drie van de tien vijftienjarigen niet in één huishouden met beide biologische ouders. Of het nu gaat om de beëindiging van een huwelijk, geregistreerd partnerschap of andere vorm van samenwoning van ouders, voor kinderen hebben deze vormen van scheiding met elkaar gemeen dat het gezinsleven verandert van één gezamenlijk huishouden naar twee huizen.

Tot eind vorige eeuw bleef de meerderheid van de kinderen na een ouderlijke scheiding bij moeder, de “verzorgende ouder”, wonen en kregen zij omgangsrecht met vader. Maatschappelijke veranderingen zoals de toenemende gelijkheid in de rollen van vaders en moeders, alsmede ontwikkelingen in de Nederlandse wetgeving rondom scheiding, hebben ertoe geleid dat veel kinderen tegenwoordig regelmatig contact houden met allebei hun ouders. Hoewel de meeste jeugdigen na een scheiding nog altijd voornamelijk bij hun moeder wonen, wordt het contact met vaders steeds vaker en uitgebreider voortgezet en verblijft bovendien een toenemend aantal ongeveer evenveel bij vader als moeder. Dit maakt dat veel jeugdigen na een scheiding twee plekken hebben om thuis te horen. In dit proefschrift onderzochten we hoe adolescenten het leven in gescheiden huishoudens ervaren in termen van hun sense of belonging: de fundamentele menselijke behoefte om relaties met anderen aan te gaan en het gevoel te hebben ergens thuis te horen. Door te kijken naar de gevoelens van verbondenheid van adolescenten kunnen we ons begrip vergroten van hoe gezinnen zich na een scheiding reorganiseren en hoe adolescenten daarbinnen functioneren.

Scheiding en jeugdigen
Onderzoek naar het functioneren van adolescenten uit gescheiden gezinnen is nodig, aangezien wetenschappelijke studies consistent uitwijzen dat deze groep gemiddeld meer problemen ervaart dan hun leeftijdsgenoten uit intacte gezinnen, waaronder een over het algemeen verminderd welbevinden, slechtere schoolprestaties en meer emotionele en gedragsproblemen. Tegelijkertijd blijkt uit onderzoek dat er binnen deze groep ook aanzienlijke individuele verschillen zijn met betrekking tot hun functioneren. Een van de belangrijkste verklaringen voor deze individuele verschillen lijkt de mate van blootstelling aan stressvolle omstandigheden te zijn. Voor jeugdigen is een scheiding namelijk een ingrijpende
gebeurtenis die zowel op korte als langere termijn drastische veranderingen in gang zet. Veelvoorkomende veranderingen in het gezin zijn een achteruitgang in financiële middelen, conflict tussen ouders, (tijdelijk) verminderde opvoedvaardigheden van ouders, vermindering van contact tussen ouders en kinderen, en verhuizingen naar nieuwe huizen en mogelijk buurten. Dergelijke veranderingen maken dat adolescenten zich moeten reorganiseren op praktisch gebied, zoals nieuwe routines vinden rondom wonen, school en vrije tijd, en op emotioneel gebied, zoals het opnieuw vormgeven van gezinsrelaties. Het feit dat nieuwe veranderingen in de gezinsomgeving en woonsituatie op kunnen treden tot ver na de initiële scheiding, maakt een scheidingssituatie bovendien meer dan alleen een tijdelijke stressvolle gebeurtenis voor adolescenten; het is een context en manier van leven waar ze blijvend mee te maken krijgen en hun weg in moeten vinden. Daarom is het van belang om meer te leren over de voorwaarden die adolescenten nodig hebben om zich goed te kunnen ontwikkelen na scheiding.

Het gevoel van verbondenheid
Voor jeugdigen in het algemeen geldt dat het ervaren van sociale banden een belangrijke rol speelt in de ontwikkeling. Menselijk gedrag wordt namelijk sterk gedreven door de wezenlijke behoefte aan positieve en duurzame interpersoonlijke relaties waarin erkenning, waardering en verbondenheid ervaren kunnen worden, zoals getheoretiseerd door Baumeister & Leary (1995). In lijn met deze theorie laten onderzoeksresultaten steeds zien dat een sterk gevoel van verbondenheid samenhangt met een beter welbevinden en meer veerkracht, terwijl een gebrek eraan samenhangt met negatieve uitkomsten zoals emotionele, gedrags- en academische problemen.

Gedurende de jeugd biedt een positieve gezinsomgeving waarin kinderen zich begrepen en ondersteund voelen een veilige basis, zo ook tijdens de adolescentie. Dergelijke ervaringen van familieverbondenheid zijn conceptueel verschillend van de relaties die jeugdigen hebben met hun vaders en moeders, in de zin dat het de kwaliteit van individuele relaties overstijgt. Anders gezegd: “Het geheel is meer dan de som der delen”. Deze manier van denken past bij de gezinsysteemtheorie, die het gezin beschouwt als complex sociaal systeem dat is opgebouwd uit aparte, maar onderling afhankelijke subsystemen. Hoe ouders met elkaar omgaan en hoe ouders en jeugdigen hun relatie reorganiseren na een scheiding lijkt daarom bepalend voor de mate waarin adolescenten uit gescheiden gezinnen familieverbondenheid kunnen ervaren.

Naast de gezinscontext vormen de school, vriendengroep en buurt(en) waarin adolescenten wonen de bredere maatschappelijke omgeving voor hun ontwikkeling. Als zodanig kunnen en zullen jeugdigen idealiter sterke bindingen ervaren in deze verschillende sociale contexten. Het wonen in twee huizen na
scheiding kan daarbij uitdagingen bieden, zeker tijdens de adolescentie, wat op zichzelf al een kritieke ontwikkelingsfase is. Tegelijkertijd worden sociale relaties buiten het gezin steeds belangrijker tijdens de adolescentie, wat maakt dat ervaringen van verbondenheid buiten het gezin ook unieke en mogelijk zelfs compenserende effecten zouden kunnen hebben op het functioneren van adolescenten met gescheiden ouders.

**Onderzoeksvragen en methoden**

Kortom, tijdens de vele veranderingen in het dagelijks leven die zich kunnen voordoen na een scheiding, is het gevoel van verbondenheid van adolescenten mogelijk een rode draad in hun functioneren. Dat wil zeggen, hoewel hun gezins- en leefomgeving aan verandering onderhevig is en relaties nieuwe vormen aannemen, blijven mogelijkheden voor positieve en duurzame relaties bestaan. Het is echter zo dat het ervaren van *belonging* voor adolescenten uit gescheiden gezinnen lastiger, of in ieder geval minder vanzelfsprekend is dan voor leeftijdsgenoten uit intacte gezinnen.

Het overkoepelende doel van dit proefschrift was daarom om ons begrip te vergroten van het gevoel van verbondenheid van adolescenten na een scheiding. Hiertoe waren de twee doelstellingen om (1) Het verband te onderzoeken tussen de verbondenheid van adolescenten binnen verschillende sociale contexten enerzijds en hun functioneren anderzijds; en (2) Gezinsdynamieken te onderzoeken die een bevorderende rol kunnen spelen in gevoelens van verbondenheid van adolescenten binnen de gezinscontext, zoals het co-oudergedrag en opvoedgedrag van vaders en moeders, alsmede aspecten die verband houden met contactregelingen na scheiding. Door onderzoek te doen naar de ervaringen van adolescenten met betrekking tot het wonen in twee huizen na een scheiding, was ons streven om de wetenschappelijke literatuur aan te vullen met nieuwe kennis, en het praktijkveld te voorzien van aanknopingspunten voor preventie en interventie.

Dit proefschrift bestaat uit één literatuurstudie en vier empirische studies die gebaseerd zijn op data uit twee onderzoeksprojecten: “Scholieren & Gezinnen” en “Waar hoor ik thuis”. Kenmerkend aan de data is dat aan de hand van vragenlijsten zelfrapportagegegevens van adolescenten tussen de 10 en 19 jaar zijn verzameld en dat er geen exclusiecriteria waren met betrekking tot de tijd sinds de scheiding: jongeren waren gemiddeld tussen de 6 en 7 jaar oud ten tijde van de scheiding. Als zodanig bieden deze data kennis van hoe adolescenten het leven in twee huizen na een scheiding ervaren.

**Samenvatting van de resultaten**

Als theoretische inbedding van de empirische studies werd in hoofdstuk 2 een interdisciplinair literatuuronderzoek beschreven naar factoren en mechanismen die een rol spelen in de gevoelens van verbondenheid van adolescenten met
gescheiden ouders. Uit de literatuur kwamen drie belangrijke stressoren in de gezinscontext na scheiding naar voren: 1) Verminderd contact met een of beide ouders en de manier waarop zorg en contact zijn vormgegeven, 2) De kwaliteit van de co-ouderrelatie, mogelijk gehinderd door regelmatige en intense conflicten, en 3) Vermindere opvoed- en relatiekwaliteit tussen ouders en jeugdigen, onder meer door stress bij ouders. Indirect kunnen deze gezinsstressoren bovendien negatief interacteren met sociale contexten buiten het gezin, in de vorm van sociaal-emotionele problemen bij adolescenten, achteruitgang in financiële middelen, en problemen van praktische, logistieke, of relationele aard gerelateerd aan de werk- en woonsituatie van ouders en de geografische afstand tussen huizen. Ook op macroniveau zijn er factoren die een rol spelen, zoals hoe we als samenleving kijken naar een scheiding en de reorganisatie van gezinnen, waarnaast scheidingswetgeving bepalend is voor hoe ouders scheiden, welke afspraken zij moeten maken en hoe jongeren daarbij betrokken worden.

In hoofdstuk 3 onderzochten we het gevoel van verbondenheid van adolescenten met en zonder gescheiden ouders, en de samenhang met hun functioneren. In vergelijking met adolescenten uit intacte gezinnen, voelden adolescenten met gescheiden ouders zich over het algemeen niet minder verbonden met vrienden of met de buurt waar ze wonen, maar wel in het gezin en op school. Deze verschillen konden slechts gedeeltelijk toegeschreven worden aan de grotere hoeveelheid ouderlijke conflicten en lagere relatiekwaliteit met ouders na een scheiding. Bij adolescenten met gescheiden ouders zijn verder ook verschillen tussen de vader- en moedercontext onderzocht, aangezien zij feitelijk te maken hebben met twee gezins- en buurtcontexten. Er kwam een duidelijk verschil naar voren, namelijk dat adolescenten gemiddeld meer verbondenheid ervaarden bij moeders dan bij vaders. Daarnaast kwam naar voren dat voor alle adolescenten sterkere gevoelens van verbondenheid in het gezin, bij leeftijdgenoten en op school samenhingen met een beter welbevinden en minder probleemgedrag. Het lijkt er dus op dat de gemiddelde verschillen tussen adolescenten met en zonder gescheiden ouders gedeeltelijk verklaren waarom adolescenten met gescheiden ouders meer problemen in het functioneren rapporteren. In onze studie vonden we geen bewijs voor de hypothese dat een lager gevoel van verbondenheid in de ene sociale context, zoals het gezin, gecompenseerd wordt door een sterker gevoel van verbondenheid in een andere sociale context, zoals de school.

De studie in hoofdstuk 4 had betrekking op de manier waarop ouders samen opvoeden, oftewel co-oudergedrag. We bestudeerden de perceptie van adolescenten uit gescheiden gezinnen op ouderlijke communicatie, respect en coöperatie, conflicten en triangulatie (het betrekken van kinderen in ouderlijke conflicten), en toetsten vervolgens in hoeverre er op basis van hun rapportage bepaalde patronen of ‘co-ouderstijlen’ te identificeren waren. In onze studie kwamen vier verschillende groepen naar voren: 1) coöperatieve ouders, 2) ouders die verwikkeld waren in een negatieve relatie, 3) ouders die eigenlijk weinig met elkaar bezig waren, maar waarvan de relatie negatief van aard was, en 4) een groep
ouders waarvan de relatie niet duidelijk positief of negatief van aard was, maar die eerder gemiddeld scoorde op alle co-ouderdimensies. Waar adolescenten met coöperatieve ouders de minste problemen in het functioneren rapporteerden, zagen we bij adolescenten met negatief betrokken ouders in de tweede groep de meeste gedragsproblemen, hoogstwaarschijnlijk vanwege het hogere risico op blootstelling aan ouderlijke conflicten.

In hoofdstuk 5 bestudeerden we de kwaliteit en kwantiteit van het contact tussen adolescenten en ouders uit gescheiden gezinnen over tijd. Daarvoor onderzochten we niet alleen de tijd die adolescenten doorbrachten met ouders in ieder huishouden (het “residentiële” contact), maar ook het digitale contact dat tussentijds plaatsvond via berichten en (video)bel gesprekken. In het contact met vaders leken digitale media vooral een manier om de momenten tussen het residentiële contact te overbruggen; meer residentieel contact hing samen met meer digitaal contact. Echter, in het contact met moeders was juist te zien dat meer residentieel contact samenging met minder digitaal contact, wat implicteert dat de behoefte aan aanvullend digitaal contact minder groot is wanneer er al relatief veel tijd wordt doorgebracht samen. Ten aanzien van het contact met beide ouders zagen we dat wanneer het contact beter was, er over het algemeen ook meer contact was. Daarnaast vonden we aanwijzingen dat betere contactervaringen met ouders over tijd ook positieve veranderingen teweeg kunnen brengen, zoals dat digitale vader-adolescent-interacties van hogere kwaliteit over tijd bijdroegen aan beter residentieel contact. De resultaten ondersteunden echter niet de hypothese dat digitaal contact met ouders kan bijdragen aan een sterker gevoel van verbondenheid bij adolescenten na scheidings; de kwaliteit van de tijd met ouders samen in ieders huishouden bleek daarvoor toch het meest belangrijk.

In de laatste empirische studie in Hoofdstuk 6 onderzochten we de mate waarin (co)oudergedrag bij kan dragen aan de gevoelens van verbondenheid en autonomie van adolescenten uit gescheiden gezinnen. Volgens de zelfdeterminatietheorie is het belangrijk voor jeugdigen dat ze autonomie en controle over eigen handelen ervaren, bijvoorbeeld in de vorm van zeggenschap in beslissingen over hun woonomgeving na scheidings. Deze studie liet zien dat adolescenten met een sterker gevoel van familieverbondenheid hadden over het algemeen ouders die naar eigen zeggen geen probleem vinden als hun kind een andere mening heeft dan zijzelf (d.w.z., meer autonomie-ondersteunend zijn), en die coöperatief en harmonieuos omgingen met de andere ouder. Adolescenten met een sterker gevoel van familieverbondenheid hadden over het algemeen ouders die naar eigen zeggen meer warm en meer autonomie-ondersteunend opvoedden. Waar de gevoelens van autonomie van adolescenten dus ook gerelateerd waren aan de interacties in het co-oudersysteem, werd de mate van verbondenheid vooral bepaald door interacties in de individuele ouder-kind systemen. Desondanks wezen onze bevindingen niet uit dat veranderingen in (co)oudergedrag, zoals wanneer ouders meer autonomie-ondersteunend waren dan gewoonlijk, veranderingen in de gevoelens van verbondenheid of autonomie van hun kinderen teweegbracht. Dit suggereert dat er
in de onderzochte gezinnen – die gemiddeld zo’n 6 tot 7 jaar geleden gescheiden zijn – inmiddels vrij stabiele interactiepatronen ontstaan zijn.

**Belangrijkste bevindingen en hun implicaties**

In lijn met de verwachtingen lieten de resultaten van dit proefschrift zien dat een scheiding van ouders een risicofactor is voor het gevoel van verbondenheid van adolescenten, wat op zijn beurt een risicofactor is voor hun functioneren. De scheiding lijkt voornamelijk negatieve effecten te hebben op de gevoelens van verbondenheid binnen de gezinscontext. Verder bracht dit proefschrift aan het licht dat er aanzienlijke verschillen zijn in de verbondenheid van adolescenten in huishoudens van vaders en moeders na scheiding. Bovenstaande, in combinatie met de bevinding dat een sterke verbondenheid op school, bij vrienden of in de wijk geen compensatie lijkt te kunnen bieden voor een verminderd gevoel van familieverbondenheid, onderschrijft de behoefte aan meer kennis over gezinsfactoren die het gevoel van verbondenheid van adolescenten na een scheiding kunnen bevorderen. De bevindingen in dit proefschrift omtrent gezinsrelaties, zorg en contact na scheiding vormen daarbij belangrijke aanknopingspunten.

Wat duidelijk naar voren kwam in dit proefschrift waren de verschillen in ouderrollen van vaders en moeders na scheiding, die consistent aanwezig waren: de hoeveelheid contact, de ouder-kind relatiekwaliteit in termen van warmte, communicatie, betrokkenheid en steun, en ook de gevoelens van verbondenheid in de twee gescheiden huishoudens. Dergelijke niveaushorten betekenen echter niet dat vaders minder belangrijk zijn dan moeders voor het functioneren van jeugdigen na scheiding; het laat voornamelijk zien dat er in het contact met vaders na scheiding meer te winnen valt. Bovendien zijn deze niveaushorten niet direct reden tot zorg. Ze zijn mogelijk deels het resultaat van verschillen in conventionele ouderrollen, waarbij vaders gemiddeld vaker grenzen stellen en autonomie ondersteunen en moeders juist gemiddeld meer warmte en emotionele steun bieden – een verdeling afkomstig uit tijden waarin vaders veel minder tijd doorbrachten met hun kinderen dan moeders, gescheiden of niet. Redelijkerwijs kan worden aangenomen dat maatschappelijke ontwikkelingen zoals de toegenomen arbeidsparticipatie van vrouwen en gelijkheid in genderrollen die hebben geleid tot grotere betrokkenheid van vaders in de zorg en opvoeding van kinderen, uiteindelijk ook zullen leiden tot meer uniforme rollen van vaders en moeders. Ouders zullen elkaar daarvoor wel actief moeten ondersteunen in het ouderschap. Frequent residentieel contact na scheiding geeft beide ouders namelijk de kans om diverse taken en rollen te vervullen. Toekomstig onderzoek zal moeten uitwijzen of en hoe de ouderrollen van vaders en moeders zich over tijd verder zullen ontwikkelen.
In dit proefschrift probeerden we op basis van de rapportages van adolescenten omtrent het leven in twee huizen na scheiding aanknopingspunten te vinden voor het versterken van hun gevoelens van verbondenheid. De verwachting daarbij was dat het leven opgroeien in gescheiden gezinnen mogelijk uitdagingen zouden bieden voor de verbondenheid van adolescenten, maar dat er ook nieuwe en positieve interactiepatronen zouden ontstaan. Hoewel onze bevindingen suggereren dat er inderdaad redelijk stabiele co-ouder en ouder-kind dynamieken zijn ontstaan, blijft het gevoel van verbondenheid van deze adolescenten achter in vergelijking met dat van leeftijdsgenoten zonder gescheiden ouders. Met name het thuisgevoel van adolescenten in vaders’ huishoudens lijkt kwetsbaar. Waar het thuisgevoel bij moeders meer vanzelfsprekend is doordat moeders vaak hun grotere opvoedroll en contact behouden, is het voor vaders en adolescenten van cruciaal belang dat er voldoende contact is om die verbondenheid te onderhouden of herstellen. Digitale media lijkt daarbij enigszins hulp te bieden, maar uiteindelijk is quality time hoofdzakelijk belangrijk voor het thuisgevoel van adolescenten.

Hoewel het versterken van het thuisgevoel van adolescenten met name inzet lijkt te vereisen van vaders en adolescenten zelf, kunnen moeders daarin mogelijk toch een ondersteunende rol bieden in de vorm van zogenaamd gatekeeping gedrag. Zo kunnen ze via hun opvattingen en gedragingen jegens de rol van vader in het leven van de kinderen een faciliterende rol spelen in het contact en de betrokkenheid van vaders na een scheiding, bijvoorbeeld tijdens het maken van (flexibele) afspraken over de woonsituatie, de wijze waarop ze vader bejegenen en over hem spreken, en de manier waarop ze het toestaan en aanmoedigen dat kinderen (digitaal) contact onderhouden met hun vader. Anderzijds kunnen moeders het contact en de betrokkenheid van vaders ook belemmeren, en moet er voor gewaakt worden dat ouders na een scheiding verwikkeld blijven in een negatieve dynamiek, want dat blijft voor adolescenten niet onopgemerkt en kan negatieve gevolgen hebben voor hun functioneren.

Samengevat laten de resultaten in dit proefschrift zien dat het ervaren van verbondenheid voor adolescenten uit gescheiden gezinnen niet vanzelfsprekend is, en dat het versterken ervan inzet en samenwerking van het gehele gezinsysteem vereist. Daarbij moet worden opgemerkt dat de bevindingen in dit proefschrift gebaseerd zijn op data afkomstig van relatief harmonieuze gezinnen, waarbinnen zich in de loop der jaren stabiele en overwegend positieve interactiepatronen hebben gevormd. Wanneer de gezinsdynamieken instabiel blijven of na verloop van tijd niet positiever van aard worden, kan dit dus worden beschouwd als een indicatie dat gezinnen professionele hulp nodig hebben. Drie aanbevelingen voor professionals in de klinische en juridische praktijk die met deze gezinnen werken, zijn: 1) Help en stimuleer gescheiden gezinnen in het onderhouden van contact tussen vaders en kinderen, direct na de scheiding, maar ook in de jaren erna; 2) Maak moeders bewust van de faciliterende rol die zij impliciet en expliciet kunnen
spelen in het contact tussen vaders en kinderen, en ondersteun hen daarbij; en 3) Moedig gescheiden ouders aan om samen te werken, en op zijn minst blootstelling van hun kinderen aan conflicten en negatieve interacties te beperken. Uiteindelijk is het de moeite waard om het gevoel van verbondenheid van adolescenten vanuit zoveel mogelijk contexten te bekrachtigen, want wanneer zij zich meer thuis voelen, gaat het beter met hen.
DANKWOORD

Februari 2018 was memorabel op twee manieren: ik begon als junior onderzoeker aan de Universiteit Utrecht en rulde mijn studentenkamer in voor een Rotterdams appartement waar ik – letterlijk en figuurlijk – in de wolken ging samenwonen. Sindsdien zie ik dagelijks in neonletters de uitspraak “Waar ik mijn goed voel ben ik thuis” en zo werd het onvoorzien het uitzicht vanaf het secretaire waar ik tijdens de pandemie zou werken aan dit proefschrift over het thuisgevoel van jongeren na scheiding. Treffend. Zowel voor hen als voor mij bleek: wanneer je je thuis voelt, gaat het beter met je en kun je je beter ontwikkelen. Ik had dit proefschrift niet kunnen schrijven zonder de mensen om mij heen.

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CURRICULUM VITAE

Biography
From 2012 to 2017, Zoë Rejaän (1994, Helmond) attended Utrecht University’s Bachelor’s program in Pedagogical Sciences, followed by a Master’s program in Clinical Child, Family, and Education Studies. During her studies she did youth-related volunteer and counseling work, and worked as a research assistant for various projects. Having finished a clinical Master’s internship at Kentalis with a focus on children with language, speech, and hearing difficulties, she continued working with these children at the NSDSK (Nederlandse Stichting voor het Dove en Slechthorende Kind), this time as a research assistant. In 2018, Zoë returned to Utrecht University, initially as a junior researcher, but from 2019 onwards as a PhD candidate on the interdisciplinary research project Where do I belong, where she was supervised by Prof. dr. Susan Branje, Prof. mr. Wendy Schrama, and Dr. Inge van der Valk. The research project, supported by Utrecht University’s strategic theme Dynamics of Youth, aimed to follow youth from divorced families over the course of two years to gain a better understanding of their sense of belonging and adjustment when growing up in multiple homes. On this subject, Zoë (co)authored scientific and professional publications, presented her work at several national and international conferences, provided thesis supervision and guest lectures to students, and made various media contributions throughout her PhD. Currently, Zoë works as a youth researcher at the University of Applied Sciences in Utrecht, and as a senior advisor at Netherlands Youth Institute. From 2023 onwards, she will work as a postdoc at Utrecht University on the NWO-funded Hear, Hear! project, in which she was part of the grant writing process with (at the time) fellow PhD candidates Dr. Rianne van Dijk and Mr. dr. Charlotte Mol, and their mutual supervisors Dr. Inge van der Valk, Prof. dr. Maja Deković, Prof. dr. Susan Branje, and Prof. mr. Wendy Schrama. This interdisciplinary research project aims to examine whether and how children participate in divorce-related decisions in families at home, during mediation and in courts, and how and through which mechanisms their participation either risks or benefits their post-divorce adjustment.
Scientific and Professional Publications


Where do I belong? It is a question that is relevant to everyone, but especially for youth growing up with divorced parents. Experiencing a sense of belonging, “feeling at home”, is a fundamental human need with important implications for the development and functioning of youth. For children, the family is typically the first and primary context to which they experience belongingness. Also during adolescence, when non-familial social contexts become more important, the family ideally remains the secure base from which they can develop themselves. A parental divorce makes experiencing family belongingness considerably more complex, as it involves drastic changes with regard to their living situation, their contact with parents, and the relationship between parents. Moreover, an increasing number of youth nowadays live a substantial amount of time with each of their parents, which means they have two places to call home. To increase our understanding of how families reorganize after a divorce and how adolescents function within these families, this dissertation focused on adolescents’ sense of belonging after divorce. To this end, the two aims of this dissertation were (1) To examine associations between adolescents’ sense of post-divorce belonging to various social contexts on the one hand and their adjustment on the other, and (2) To examine family dynamics that may play a facilitating role in adolescents’ sense of family belonging, including coparenting and parenting behaviors of fathers and mothers, and aspects related to care and contact arrangements after divorce.