

**Immigrant Adolescents' Active Role in Family Adaptation
Processes:
The Do's and Don'ts**

Von der Philosophischen Fakultät
der Gottfried Wilhelm Leibniz Universität Hannover
zur Erlangung des Grades einer
Doktorin der Philosophie (Dr. phil.) genehmigte
Dissertation

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2021

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Tag der mündlichen Prüfung: 13.09.2021

Acknowledgements

First of all, I would like to express my gratitude to my supervisor, Peter Titzmann, for being incredibly supportive throughout this whole journey. You gave me so much freedom to pursue my interests and at the same time were always available when I had questions, read countless drafts of manuscripts and funding applications and have taught me not only to formulate my ideas and arguments clearly and confidently, but also to convince others of them. You gave me a lot of valuable advice on navigating the jungle of academia, encouraged me from the first minute to participate in conferences and colloquia and to talk about my research, involved me in symposia and papers, and introduced me to other researchers. Thanks for offering me so many opportunities!

A huge thanks goes to the wonderful members of our Team. Thanks Alison, Heike, and Madalina for having accompanied me the whole time, discussing the ups and downs of academia life during lunch time and in so many team meetings. You are all such warm-hearted, smart, and motivating people and a constant source of emotional and professional support.

I am also extremely happy to have joined such a great, close-knit department where, whenever it counts, everyone works together as one big team. The dialogue with you, also across disciplines and topics, in colloquia, during meals or at the coffee machine, have broadened my view on many professional, social and personal topics. You made me enjoy coming to work every day!

I am also thankful for the financial support of the Graduate Academy of the Leibniz University Hanover that allowed me to attend many interesting conferences, workshops and summer schools.

Last but not least, I want to thank my family and my friends! Above all, my parents afforded me so many opportunities and always supported my plans. I am so grateful that you encouraged me to follow this path!

Thank You!

The present doctoral thesis is based on the following articles:

1. Aumann, L., & Titzmann, P. F. (2020). Why do Youth Support Their Families? A Person-Oriented Approach in Migrant and Native Families. *Journal of Youth and Adolescence*, 49(2), 506–519. <https://doi.org/10.1007/s10964-019-01167-z>
2. Aumann, L., Titzmann, P. F. & Lee, R. M. (2021). Acculturative Change: Striking a New Path to Study the Adaptation Processes of Immigrant Adolescents and Their Families. *Manuscript submitted for publication.*
3. Aumann, L., & Titzmann, P. F. (2020). Adolescents' Technical and Culture Brokering in Immigrant and Native Families. *Manuscript submitted for publication, in Revision.*
4. Aumann, L., & Titzmann, P. F. (2018). Acculturation Gaps in Diaspora Immigrant Adolescent–Mother Dyads: The Case for a Domain-, Group- and Context-Specific View on Family Adaptation. *International Journal of Psychology*, 53, 3-12. <https://doi.org/10.1002/ijop.12524>

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Abstract

Background: Recent theoretical approaches emphasize adolescents' active skills and agency in developmental processes and propose that immigrant adolescents may be the socializing agents for their families in new environments. However, empirical research on immigrant adolescents' active role in the family reveals some research gaps. The overarching goal of this dissertation was to investigate immigrant adolescents' active role in family adaptation and determine how it is related to adolescent and familial psycho-socio-cultural adjustment. Specifically, to achieve this goal, I examined different forms of adolescents' involvement in family processes as well as its associations with risks and opportunities for adolescent and family adaptation and interactions. I also aimed to identify factors that can explain differences in immigrant adolescents' active role across families, including migration conditions and acculturative timing.

Methods: Adolescents' active role in the family was investigated by considering two types of active youth involvement in family processes: activities by which adolescents directly support their families (termed *direct adolescent influence*) and ones in which adolescents' developmental progress unintentionally provokes family reactions (termed *evocative adolescent influence*). To examine adolescents' active role and its hypothesized relations and outcomes, I drew on two cross-sectional and one longitudinal data set containing parent-adolescent data from five ethnic groups (native Germans, native Swiss, German immigrants, ethnic German repatriates, Russian Jews) in three contexts (Germany, Israel, Switzerland). The data were analyzed using person-oriented, comparative, and multi-group approaches as well as structural equation modeling in Mplus and SPSS.

Results: The analyses revealed substantial levels of direct adolescent involvement in families in the form of migration-specific (i.e., brokering) and migration-unspecific support (i.e., instrumental and emotional support). In addition, adolescents who provided migration-specific support were shown to provide more direct support in families in general. Evocative adolescent influence was confirmed through relations of adolescents' independent acculturation with family interactions. Adolescents' active role in family processes was supported in all studies independent of ethnic group or context and in host and ethnic culture domains. Notably, the analyses revealed that adolescents' active role can be a double-edged sword for family adjustment with both positive (e.g., self-efficacy, child disclosure) and negative (e.g., exhaustion, family hassles) adolescent and family outcomes. Further, group- (e.g., family resources) and context-characteristics (e.g., segregation) can foster adolescents' active role in families. Finally, adolescents' acculturative speed as well as parent-adolescent differences in acculturative timing were shown to strengthen associations of adolescents' acculturation and family dynamics.

Conclusion: Adolescents are active agents creating their own development in multicultural societies and can contribute substantially to successful family adaptation. In this respect, this dissertation provides insights into the active and constructive roles that adolescents can adopt in families and societies and discusses implications for future research and practice.

Keywords: Jugendliche mit Migrationshintergrund; familiäre Beziehungen; Akkulturation; immigrant youth; parent-child relationships, acculturation

1 Introduction

Today, more people than ever live in a country other than the one in which they or their parents were born. In 2019, the number of immigrants globally reached an estimated 272 million and with about 33 million (12%) youth constitute a significant proportion of this group (UNICEF, 2020). Additionally, youths with a migration background—that is, youths who are descendants of immigrants—make up substantial percentages of the population in many countries across the globe and experience similar developmental and acculturative processes as immigrants. Understanding the prerequisites for and underlying processes of the successful development of this large group of youths is therefore of the utmost importance.

Most immigrant youths move to a new country with their parents and siblings, making acculturation—that is, adapting to life in a new cultural context—also a family affair. Previous research has shown that family migration often raises unique challenges, such as differences in socio-cultural adjustment between generations, which can change parent–child interactions and relationships over time (Cheung et al., 2011). Research on the interplay of family members' adaptation processes and particularly on directions of enculturation and socialization within immigrant families can reveal the underlying processes of family acculturation and provide important insights into the factors related to the successful adaptation of the whole family (Fuligni, 1998). To date, studies on immigrant family adaptation have mainly targeted immigrant youths being embedded in the family context and investigated how adolescents' development in a new context is shaped by parent-guided enculturation and socialization. Adolescents' active participation in their own acculturative and adolescent development as well as their active role in family adaptation processes has often been disregarded in this research (e.g., Motti-Stefanidi et al., 2012; Schwartz, Walsh, et al., 2020; Titzmann & Gniewosz, 2017). Moreover, the majority of existing research on adolescents' and familial acculturation processes has focused solely on the risks and challenges for the family, although they may also offer opportunities for adolescent and familial growth (Shen et al., 2019). To gain a comprehensive understanding of adolescents' role in immigrant families, it is also essential to identify its universal and specific processes within families across ethnicities, cultures, and contexts by studying adolescents in different groups of families in different contexts (Wang & Miller, 2020). However, whereas the unprecedented migration contributes to increasing cultural diversity in most societies around the world, research on immigrant youths and their families is still limited to a small number of ethnic groups and destination countries (Bornstein, 2017). Thus, although the investigation of immigrant family dynamics is an important and growing field of research, the complexity of youths' acculturation and their role in family interactions and adjustment still poses a great scientific challenge.

Therefore, in this dissertation, I investigate adolescents' active role in family adaptation processes by taking a multidimensional, comparative, dynamic, and risk- and resource-oriented perspective on interactions in immigrant families. In Chapter 1, I draw on previous research in developmental, acculturative, and cross-cultural psychology to elaborate on immigrant adolescents' active role in their own as well as their family's adaptation processes, identify current research gaps, and derive a conceptual model for my research. Specifically, in this dissertation, I focus on how adolescents' active role is related to the families' psycho-socio-cultural adjustment. Moreover, I examine whether characteristics of the immigrant groups, host societies and the acculturation process can affect these relations to obtain indications of specificity or universality of immigrant family processes. In Chapters 2–5, I present four studies investigating two forms of adolescents' active role in the family and their risks and opportunities for the psycho-socio-cultural adjustment of the family. Further, each study targets diverse, understudied samples to contribute to the identification of universal and specific adolescent and family processes. The results and implications of the empirical studies are discussed in Chapter 6. Finally, in Chapter 7, I draw an overall conclusion.

1.1 Immigrant Adolescents' Active Role

A general understanding of how adolescents develop active, independent agency and become actively engaged in their own development is the foundation for understanding their active role in family processes. Thus, knowledge about how immigrant adolescents undergo developmental processes, that is, the extent to which they are active agents of these change processes, can inform theory and practice regarding the role that adolescents can adopt in families' enculturation and socialization processes. Moreover, it may provide insights into the implications that adolescents' role in family processes may have for their own development and adaptation and those of their family (Weisskirch, 2020). Therefore, in the following paragraphs, I will describe findings on immigrant adolescents' active role in their own developmental processes, the ways in which adolescents' active agency can unfold in the immigrant family context, and how immigrant adolescents' active role may be related to the psycho-socio-cultural adolescent and familial adjustment and adaptation.

1.1.1 Immigrant Adolescents' Active Role in Developmental Processes

In developmental and acculturation research, it has long been assumed that adolescents passively undergo developmental processes rather than actively managing their development and adaptation (Mendle, 2014; Titzmann & Gniewosz, 2017). Parents have extensively been conceptualized as the primary socialization agents of many of the core values and behaviors that their children internalize during childhood and adolescence by using authoritarian (i.e., vertical)

socialization strategies (Grusec & Hastings, 2007). Accordingly, parents have been supposed to socialize their offspring through direct influence (role modeling or imitation), by exposing their offspring to social reinforcement (norms), but also by indirectly affecting their children by altering the behavior of others so that it complies with the parental ideas of growing up (Kandel & Andrews, 1987). In consequence, in the former public and academic debate, children and adolescents have often been presented as malleable by parental socialization in every domain of life. However, this rather passive view of the development of adolescents is increasingly being challenged by theories that focus on youths' freedom of choice and self-regulation (Gestsdottir & Lerner, 2008; Schwartz, Szabó, et al., 2020). Thus, more recent theoretical approaches have emphasized, among others, the active skills and competencies that youth particularly develop in adolescence, such as organizing actions over time, making self-determined decisions, or working towards a long-term goal, and which can also foster their self-determined agency (Larson, 2011). Accordingly, adolescents are increasingly described as "active agents creating their own personal narratives and directing their present and future lives" (Lee et al., 2016, p. 1062), and, thus, more and more seen as individuals who can influence their own developmental growth and contribute to (the development of) families, groups, or societies.

Among immigrant adolescents, acculturative processes in addition to adolescent development are assumed to enhance skills related to adolescents' active agency and active role in developmental processes (Suárez-Orozco et al., 2018; Zhou et al., 2017). Acculturation traditionally refers to changes that take place in all domains of life as a result of long-term, continuous contact between culturally dissimilar peoples (Redfield et al., 1936). On an individual level, acculturation refers to changes in a person's customs, habits, activities, language, identification, and values and is a dynamic, individual process (Berry, 1997). This illustrates the multi-faceted, developmental nature of acculturation, which comprises multiple processes and is rightly thought of as one of the most thorough sorts of individual reorganization and adaptation (Oppedal & Toppelberg, 2016; Ward & Geeraert, 2016). For immigrant adolescents, acculturation is an even more complex and nuanced process than it is for adults. Immigrant adolescents face similar culture-related tasks to their parents from at least two different cultures, but they simultaneously have to master the normative, age-salient tasks of adolescent development (Reitz et al., 2014). Successful adaptation with respect to both kinds of tasks is a harbinger of future adaptation, indicating prospects for positive long-term outcomes of immigrant youths (Jugert & Titzmann, 2019). However, adolescent and acculturative development are not just cumulative sources of influence on immigrant adolescents that can be studied and understood separately. Normative developmental and acculturation-related tasks can also interact or intertwine, so that their implications for adolescents' development are not always clearly

distinguishable from each other (Juang & Syed, 2019; Lui, 2015). As such, acculturative and adolescent processes are both assumed to foster immigrant adolescents' development of active skills and, thus, self-determined, active agency and jointly can also intensify or accelerate such developmental growth (Schwartz, Szabó, et al., 2020). Therefore, immigrant adolescents may adopt a particularly active role in developmental processes while growing up in a new society (Motti-Stefanidi et al., 2012). This has been supported by research indicating that some immigrant adolescents exhibit more mature and independent behavior than their native peers (Fulgini & Telzer, 2012). However, since adolescents' (acculturative and general adolescent) development always takes place in constant interaction with their proximal social environments (Silbereisen et al., 1986), adolescents' development and use of active skills and agency need to be studied in relation to these contexts (Bronfenbrenner, 1977; Suárez-Orozco et al., 2018).

1.1.2 Immigrant Adolescents' Active Role in the Family Context

Previous research has suggested several (interrelated) developmental contexts that can shape adolescents' developmental choices and adaptation strategies, including becoming active agents of developmental processes (Miklikowska et al., 2019). However, among immigrant adolescents, several models propose that the family context in particular may be crucial for adolescents' development and exploration of active skills and agency (see for example Bronfenbrenner, 1986; Oppedal & Toppelberg, 2016; Riesch et al., 2006; Sam & Oppedal, 2003; Suárez-Orozco et al., 2018; Szapocznik & Kurtines, 1993). Most immigrant youths migrate in a family unit, and their settlement in a new country is a collective process that involves the participation of multiple family members. So far, most studies on immigrant family acculturation processes have mainly targeted how immigrant adolescents' development in a new context is shaped by their parents and the host society. How immigrant adolescents are actively engaged in families' adaptation processes has often been studied only marginally and incidentally, although adolescents in particular may play an important and active role in the successful adjustment of the family (e.g., Barbot et al., 2020; Motti-Stefanidi et al., 2012). Nevertheless, research in developmental psychology and findings on youths' and adults' acculturation processes can offer important insights in this respect.

In developmental psychology, directions of influence in intrafamilial socialization and enculturation processes are explained by intergenerational transmission effects within parent–child relationships (Schönpflug, 2009). Intergenerational transmission, the process of carrying (cultural) information from one generation to another, has significant implications for individual development and adaptation and for the relationship dynamics within families (Dennis et al., 2010). Research on such transmission effects and related family dynamics has shown that, with

ongoing development, youths' influence on the family increases, whereas the parental influence on the offspring decreases (Grusec & Hastings, 2007). In particular, adolescents' development, such as gradually becoming independent from parents and developing a coherent sense of social and cultural self, are assumed to change their role in the family, with adolescents gaining in power and impact on family processes (Hurrelmann & Quenzel, 2018; Smetana, 2011).

In immigrant families, the process of intergenerational (cultural) transmission may be guided even more by their offspring. Among immigrant adolescents, similar to their active agency in their own development, acculturation-related in addition to general adolescent processes can reinforce the significance of adolescents' role in family adaptation processes (Kam & Lazarevic, 2014a). Consequently, both developmental processes of adolescents, that is acculturation and adolescence, can cause and contribute to a new dynamism in the family (Suárez-Orozco et al., 2018; Zhou et al., 2017). In this respect, particularly migration-related processes of families seem to be guided mainly by immigrant adolescents, pointing to the specific and meaningful role that immigrant adolescents can adopt in acculturative family development (Weisskirch, 2020).

Immigrant adolescents' active role in migration-related processes of families may be explained by their ability to adapt faster to the host culture than their parents (Knight et al., 1992; Umaña-Taylor et al., 2014). The result is that adolescents are often better prepared to deal with demands in the new society than their parents (Hwang et al., 2010; Telzer, 2010). This acculturative advantage of adolescents can be explained by their increased level of contact with members of the host society through school attendance but also by developmental advantages, such as the easier acquisition of new behaviors at younger ages (Birdsong & Vanhove, 2016). In this respect, adolescents' faster adaptation has been shown to have various implications for family dynamics with regard to family relationships, hierarchy, and roles—findings that cannot be explained by classic one-way parent-to-child socialization models and that point to adolescents' active participation in these processes (Fuligni & Telzer, 2012). Thus, against the backdrop of youths' advantage in acculturation processes and the increasing empowerment in adolescence, recent intergenerational adjustment theories assume that adolescents play a critical role in the overall adjustment of immigrant families by determining the framework for how all family members react to the challenges of adaptation to a new cultural context (e.g., García Coll & Marks, 2012; Suárez-Orozco et al., 2018). That is, indications accumulate that immigrant youths may be the driving force not only behind their own but also behind their family's adaptation processes (Titzmann & Gniewosz, 2017; Zhou et al., 2017). In this respect, immigrant youths have also increasingly been described as socializing agents for their families, with adolescents actively affecting the adaptation of the whole family (Lee et al., 2016).

Even though these findings point out immigrant adolescents' active role in family adaptation processes, the described literature shows substantial research gaps. The most important may be the need to investigate in more depth how immigrant adolescents can (actively) engage in enculturation and socialization processes in families. More precisely, that is what (different) types of adolescent influence exist and how they manifest themselves. This also includes which (many-sided) consequences adolescents' active role may have for the adjustment of the family and the adolescents themselves (Shen et al., 2019). Moreover, research has repeatedly shown that it is critical to avoid overgeneralization of findings, particularly in acculturation research. Therefore, it is important to investigate whether adolescents' active role in family adaptation is a universal phenomenon that unfolds similarly among different families or is specific with regard to the characteristics of the group, context or process studied (Bornstein, 2017). In the next paragraphs, these research gaps as well as the importance of filling them are described in further detail.

1.2 How can Adolescents Actively Engage in Family Adaptation? Forms of Immigrant Adolescents' Active Role in Families

To address the first research gap, this dissertation aimed to provide a more specific, comprehensive view of how immigrant adolescents can be involved in family processes. Based on the presented findings on socialization strategies in families and on immigrant family dynamics (e.g., Kandel & Andrews, 1987), I have derived two ways in which adolescents can (at least) affect family adaptation and interactions: directly, by providing different forms of support for families (in the following referred to as *direct influence on the family*), and indirectly, by causing parental reactions to their own acculturative and adolescent change (referred to as *evocative influence on the family*). In order to gain deeper insights into both facets of adolescents' active role, they should be considered individually. Therefore, in the next two sections, I will elaborate on previous findings on both forms separately.

1.2.1 Direct Adolescent Influence on Family Adaptation

Direct adolescent influence comprises activities of adolescents by which they directly and intentionally support their families. Examples of this direct influence are the provision of migration-specific or -unspecific, behavioral, or emotional support (Weisskirch, 2020). In terms of migration-specific support, studies have found that about 90% of immigrant adolescents translate documents for their parents or assist them in contact with host society members (Fuligni & Telzer, 2012), a behavior that has been termed language or culture brokering (Tse, 1995). Brokering is often the result of adolescents' higher socio-cultural skills compared to their parents. Occasions and content of brokering can vary from the translation of school notes to being present

at exchanges with authorities. In this regard, immigrant families' socio-cultural adaptation can be understood as a systemic family process, in which adolescents provide their (host culture) resources to support other family members (Rote & Smetana, 2016).

In accordance with language and culture brokering, research has also indicated brokering behavior in migration-unspecific domains of life in which, similar to the socio-cultural adjustment, intergenerational competence gaps are evident. Most adolescents are, for example, far more knowledgeable than their parents about modern communication technology, and they often transfer this knowledge to their parents (Correa, 2014). This may result in similar transmission effects to those observed in migration-specific domains, particularly when parents depend on this knowledge, and it has been referred to as technical brokering (Kam & Lazarevic, 2014a; Katz, 2010).

Adolescent brokers also often develop more mature communication with their parents than would be expected normatively at this age. This can put adolescents into meaningful positions in immigrant families, resulting in hierarchy shifts (Titzmann, 2012). Such hierarchy shifts can also lead to adolescents assuming more (parental) responsibilities and tasks in general, which are not necessarily migration-specific. This phenomenon has been referred to as parentification or role reversal and is a migration-unspecific form of direct adolescent influence (Jurkovic, 1997). With respect to parentification, immigrant youths have been found to assist their parents regularly in daily household management, comprising *instrumental* (help in making important decisions, care for siblings) and *emotional* (reassuring parents, mediation in family disputes) support for parents (Fuligni & Telzer, 2012). Some data also support the view that different forms of domain-specific direct adolescent influence (e.g., language brokering, technical brokering) can reinforce each other or generalize to broader responsibilities (e.g., parentification). This may explain why immigrant adolescents are assumed to be more actively involved in family processes than their native peers (Kam & Lazarevic, 2014a; Titzmann, 2012). However, adolescents can also affect family life less directly. This form of influence is described in the next section.

1.2.2 Evocative Adolescent Influence on Family Adaptation

In this dissertation, I also propose another, less direct form of adolescents' active role in family processes: evocative adolescent influence. Since every developmental process or action proceeds in constant interaction with the environments in which individuals are embedded, immigrant adolescents' embeddedness in the family suggests that they may also affect family life and interactions without actively supporting them (Burke et al., 2009; Silbereisen et al., 1986). The embedded context model (Szapocznik & Kurtines, 1993) depicts this embeddedness of

immigrant adolescents in the family, and assumes a reciprocal influence between all described actors, which can be intentional and unintentional. In this respect, evocative adolescent influence can be described as an unintentional influence of adolescents on the family, whereas direct adolescent influence, as described above, comprises an intentional influence of adolescents. Such unintentional, evocative influence of adolescents on the family can occur, for example, through adolescents' acculturative adaptation processes (e.g., orientation towards host culture peers), which can change adolescents' attitudes and behaviors and in turn affect family life. This can be explained by the fact that even changes in attitudes are usually accompanied by changes in behavior, particularly in the context of acculturation, so that attitudinal changes cannot be undertaken detached from the family's perception and behavioral and/or emotional reactions (Bronfenbrenner & Morris, 2006; Sam & Oppedal, 2003; Zhou et al., 2017). Similarly, immigrant parents are confronted with adolescents' changes and adaptation with regard to adolescence (e.g., seeking autonomy), which may also evocatively affect family life (Zhou et al., 2017). However, in this doctoral research, I predominantly focus on evocative adolescent influence regarding adolescents' acculturative processes.

A case of evocative adolescent influence is an intergenerational difference in acculturative processes, such as differences in the adoption or retention of cultural values or behaviors that need to be regulated by the family. This phenomenon has been termed acculturation gap or acculturation dissonance (Hwang et al., 2010). As one example, research has shown that adolescents, who adopted host culture values to a greater extent than their parents, have reported higher levels of family conflicts and reduced intrafamilial communication than adolescents with congruent values with their parents (Hwang et al., 2010; Juang et al., 2012; Titzmann & Sonnenberg, 2016). Thus, although adolescents do not directly affect their parents through their value system or (host culture-oriented) life choices, such self-determined acculturative development of adolescents can (evocatively) change family interactions because parents may feel alienated from their offspring or may not share their (new) value or life prospects (Dennis et al., 2010). However, due to its unintentional nature, evocative influence is more difficult to assess and investigate than direct adolescent influence. Nevertheless, evocative adolescent influence can be studied in (at least) two ways. Either one can investigate how parent-adolescent differences (e.g., acculturation gaps) themselves are related to family interactions, because these gaps indicate that parents can perceive and react to adolescent change, or one can investigate how trajectories of adolescent acculturation and interindividual differences in adolescent acculturative trajectories (e.g., differences in adolescents' speed of adaptation) are related to family processes. This would allow to determine which characteristics of adolescents' (active) growth particularly concern the family.

The presented findings indicate that immigrant adolescents can adopt an active role in family processes by exerting an influence on the family in (at least) two ways—directly and evocatively. In the following sections, I always refer to these two forms of adolescents' active role in family processes. When examining adolescents' active role in the family, however, it is important to establish not only how adolescents can be actively involved in family processes but also what implications this active participation can have for the adjustment of the adolescents themselves and their families. This issue is the focus of the next section.

1.3 Risks and Opportunities of Adolescents' Active Role

In former research, migration and family acculturation processes have often been considered from a stress and strain perspective (Kam & Lazarevic, 2014b; Motti-Stefanidi & García Coll, 2018). Models such as the acculturation gap–distress model (Szapocznik & Kurtines, 1993) have particularly focused on how the acculturation process can foster family conflicts and distancing and highlighted risks for youths' and families' adjustment (Hwang et al., 2010). However, increasing numbers of studies also point to positive outcomes and opportunities for adolescents' and their families' psycho-socio-cultural adjustment and suggested including strength-based approaches in immigrant family acculturation research (Shen et al., 2019). With regard to adolescents' active role, research has also progressively indicated the potential of adolescents' active agency for the development of the adolescents themselves and for family adaptation in addition to its risks. For example, although research on parentification has frequently revealed that adolescents' active role in family processes can cause exhaustion and depressive symptoms among adolescents and deteriorate familial relationships, some research on this direct adolescent influence on the family has also pointed out the potential for social competence of youths, as well as an increasing sense of responsibility and self-esteem (Hooper et al., 2008; Lerner et al., 2009; Titzmann, 2012). Moreover, another benefit of direct adolescent influence on family adaptation, such as brokering, may be a realignment of parent–adolescent relationships, which can enrich family interactions by increasing communication and promoting the intrafamilial understanding—an important prerequisite for family attachment and youths' successful development (Stuart et al., 2010; Titzmann & Gniewosz, 2017). As language or culture brokers, adolescents can also promote socio-cultural knowledge and the adaptation of the family by facilitating contact with the host community (Weisskirch, 2020).

With respect to evocative adolescent influence, research has shown that some adolescents, who adopted host culture values to a greater extent than their parents, reported reduced proximity and communication and higher levels of family stress and alienation than adolescents with congruent values with their parents (Juang et al., 2012; Titzmann & Sonnenberg, 2016). This

evocative adolescent influence on the family may, however, also not be limited to negative family outcomes. In families with high parental motivation to adapt to a new society, adolescents' adoption of host culture values or behaviors can strengthen parent–child relationships and increase intrafamilial communication (Trickett & Jones, 2007).

These mixed findings indicate that adolescents' active role in the family may be a double-edged sword, with risks and opportunities for family life lying close together. Therefore, this dissertation aimed to add to the existing literature by investigating different forms of adolescents' active role in family dynamics and determining how they are related to negative as well as positive outcomes in the family. Relations between adolescents' active role and families' psychosocio-cultural outcomes may, however, differ between families. For example, the characteristics of the society in which immigrant families settle or the socio-economic resources of immigrants may affect the complex process of family acculturation and the role that adolescents adopt in it. In the following sections, I will therefore shift the focus on two key factors - migration conditions and timing of acculturation processes - that may affect adolescents' active role in families and its relations with family adjustment.

1.4 Universality and Specificity of Adolescents' Active Role

When investigating immigrant adolescents' role in families' socialization and enculturation processes, it is vital to consider the interactional context in which these processes occur (Rosenthal et al., 2020; Zhou et al., 2017). The interactional context includes the characteristics of the immigrants themselves, the groups or countries from which they originate, their socioeconomic status and resources, and the country and local community in which they settle (Schwartz et al., 2010). With regard to the increasing multiculturalism in societies, the cultural setting of youth and family adaptation can, however, not be assumed to be universal among all families, which raises the question of whether the processes and pathways of adolescents' active role in family adaptation are universal across immigrant families (Bornstein, 2017; Suárez-Orozco et al., 2018; Ward & Geeraert, 2016). Moreover, it can hardly be assumed that adolescents' active role in family adaptation is a straight-line, universal process because acculturation processes are characterized by substantial inter- and intraindividual variance over time (R. M. Lee et al., 2020; T. K. Lee et al., 2020). Empirical findings focusing on and identifying specific and universal processes of adolescents' and families' adaptation are, however, still scarce in acculturation research, limiting the generalizability of existing findings (Birman & Addae, 2015; Motti-Stefanidi & García Coll, 2018; Titzmann et al., 2020). Addressing this gap is especially important in times of replication problems in psychological research. Therefore, in this thesis, I investigated the universality and specificity of adolescents'

active role in family adaptation with regard to three important factors: across different groups, across different contexts, and in dependence of the dynamics and timing of acculturation processes. Of course, it is hardly feasible to prove universality of such behaviors and processes because in practice there is hardly any possibility to conduct a full survey for very large and diverse target groups such as immigrant families, or even approximately large sub-surveys. However, as with any study of samples of an overall population, conclusions can be drawn about the representativeness of a sample or study group (e.g., a particular immigrant group) for the overall population and, based on this, indications of transferability can be derived. This is the purpose of this dissertation by examining adolescents' active role in family adaptation in several, understudied immigrant groups and contexts to gather indications that point to universality or specificity. As the characteristics of the migrating group and the migration context are often intertwined (Bornstein, 2017), I summarized them as migration conditions in this dissertation. Thus, this dissertation focused on the role of two key factors, migration conditions (including group- and context-characteristics) and acculturative timing, which are explained in more detail in the next sections.

1.4.1 Migration Conditions

Although most immigrants face similar challenges in the acculturation process, there are still considerable differences between and within immigrant groups, for example in terms of their resources or their cultural and ethnic heritage. Similarly, the environments in which immigrants settle can differ widely and be, as one example, more or less supportive in immigrants' adaptation process. Therefore, immigrants cannot be considered as a homogeneous group, the members of which migrate to uniform contexts (Suárez-Orozco et al., 2018). This also means that the generalizability of findings from a particular immigrant group or in a particular context, such as high levels of direct adolescent support in LatinX families in the US, to other immigrant groups in other contexts is uncertain (Fulgini, 2001; Wang & Miller, 2020). For example, previous research has shown that immigrant group-characteristics, such as the social network in the new society, socio-economic status (SES) and resources, or cultural distance to the host society, can affect family adaptation and dynamics and, thus, can also have an effect on adolescents' participation in these processes. In low-SES families, families with a small social network or families with a high cultural distance to the host culture, parents may rely on their children to a greater extent than in families that are more strongly integrated into the receiving society and have a larger social network and/or more financial resources (Portes et al., 2005; Tsai et al., 2013). Thus, adolescents may differ in providing family support depending on the socio-economic resources of the family or the cultural distance to the host culture. Moreover, this

means that existing findings on adolescents' involvement in family adaptation from frequently studied immigrant groups (e.g., low-SES or high cultural distance immigrants in the US) are not simply transferable to immigrants facing other conditions or circumstances. Studying immigrant group-characteristics, such as families' migration motivation or pre-migration knowledge about the host culture, is also essential to gaining an understanding of the specificity or universality of processes related to adolescents' active role in the family. Families with a high integration motivation, for example in the case of highly skilled work migrants with planned permanent migration, may rely heavily on their faster-adapting offspring and even foster and ask adolescents to support them actively in the adaptation process (Khuwaja et al., 2013; Tsuda, 2009). In families with a high level of parental knowledge about the host culture, such as families of diaspora immigrants, who share their religious, cultural, and/or ethnic background with the host society even before their arrival, (parental) knowledge may minimize or even reverse intrafamilial acculturation differences so that adolescents participate less actively in family adaptation in these families (Birman & Poff, 2011). Nevertheless, parents may appreciate adolescents' active agency in acculturation, resulting in closer parent-child relationships or increased communication. Thus, although adolescents may be less actively engaged in family adaptation in these families, their acculturative development may still evocatively affect family interactions.

With regard to contextual conditions, the settings of the host society may also affect the way in which adolescents directly or evocatively shape family adaptation processes. This includes, among others, the interplay of immigrants and host society individuals, and these interactions can be more or less supportive in different countries (Schwartz et al., 2010). Contextual factors, such as the attitude of the host society towards immigrants, the structural resources provided by the host society, and the political orientation or ethnic composition of the host country, have been shown to influence the adaptation and dynamics of immigrant families (Sam, 2018; Yağmur & van de Vijver, 2012). In less supportive contexts, for instance when authorities do not provide multi-lingual or simplified forms, adolescents may be more actively involved in family processes (e.g., translating) than in supportive societies. Hence, such contextual characteristics can also affect the extent to which immigrant adolescents (have to) support their families (Phalet & Baysu, 2020). Moreover, (acculturative) family dynamics and the role that adolescents adopt in them might also differ depending on the segregation level of the family's neighborhood. In high-segregation environments, families usually have more social ties (predominantly with other immigrants from the ethnic country) than in low-segregation environments, which might reduce the importance of youths for the family (Tsuda, 2009).

The described heterogeneity of immigrant families with regard to, among others, varying amounts of family resources or structural support provided by receiving countries questions the generalizability of processes related to adolescents' active role in family adaptation across ethnic groups and contexts. Thus, allowing for specific group- and context-characteristics can increase the knowledge of whether and which migration conditions can foster adolescents' involvement in family processes and whether adolescents' active role in family adaptation may be rather universal or only occurs in some immigrant families (Deater-Deckard et al., 2017; Lindner et al., 2020). Moreover, considering the heterogeneity of immigrant families may also shed some light on contradictory findings in adolescent- and family-related acculturation research (Anagnostaki et al., 2016; Ozer, 2020; Telzer et al., 2016). However, to date, ethnic and contextual diversity in research on immigrant adolescents' and their families' adaptation are still rare (Bornstein, 2017). Therefore, this thesis aims to address this research gap by examining relations of direct and evocative adolescent influence with family interactions and adjustment in different, understudied ethnic groups and contexts.

1.4.2 Acculturative Timing

Comparable to adolescence, acculturation is neither passive nor static but a dynamic developmental process (Oppedal & Toppelberg, 2016). Immigrant adolescents and their families usually do not linearly integrate host culture norms, values, and behaviors into their existing set of ethnic culture values and behaviors because straight-line acculturative adaptation is not possible in most cases due to the structural, cultural, and individual processes (Bornstein, 2017). Thus, it can be assumed that adolescents' and families' acculturation is characterized by substantial intra- and interindividual variance over time. Accordingly, adolescents' active agency in family adaptation may depend on different (adolescent and familial) timing aspects, such as individual differences in acculturative trajectories or the length of residence in a new country (Titzmann & Lee, 2018). To be able to decipher the interdependence of adolescents' and family (adaptation) processes, it is therefore necessary to take into account their individual dynamic acculturative trajectories. One approach to systematically describing and examining dynamic intraindividual changes in acculturation processes over time was recently suggested by Titzmann and Lee (2018), who introduced the concepts of acculturative timing, tempo, pace, and synchronicity (see also R. M. Lee et al., 2020). These concepts allow researchers to methodically investigate the speed of acculturative changes (pace), the duration of acculturation processes, the state of acculturation in relation to other immigrants (relative timing), and the similarity of acculturation processes across domains (synchronicity). Applying these concepts in immigrant family research can inform about how immigrant adolescents (and their families) actively

negotiate their acculturative development and how this timing, as well as intrafamilial differences in timing, is related to family adaptation and interactions. However, studies that have addressed the dynamics of acculturation processes are still too small in numbers in immigrant adolescent and family research (R. M. Lee et al., 2020; Schwartz, Szabó, et al., 2020).

With regard to adolescents' role in the family, in particular acculturative pace, the speed at which acculturative changes occur in a given dimension or domain over time, may broaden the understanding of the circumstances under which immigrant adolescents particularly engage in or affect family adaptation processes. The significance of pace of adolescents' developmental changes for family dynamics has already been suggested in developmental psychology. Findings of puberty research have shown that the speed at which adolescents develop can explain why they gain more or less power within families. Further, the pace of changes may explain interfamilial differences in parent–adolescent relationships—a fast pace may overburden parents because they have less time to cope with adolescents' changes (Beltz et al., 2014; Mendle, 2014). The same may apply to acculturation-related changes among immigrant adolescents (Titzmann & Lee, 2018). Moreover, relative timing, which assesses between-person differences in timing, may be insightful with regard to immigrant family dynamics. Although relative timing has been established as acculturation state in relation to peers with the same length of residence (Titzmann & Lee, 2018), it may also be transferable to family members, who usually have the same length of residence. Based on findings on acculturation gaps, particularly an advanced timing of adolescents compared with their parents in host culture domains may foster adolescents' direct support for their parents or strengthen the associations of adolescents' acculturative change and family outcomes (evocative influence). These assumptions on acculturative pace and relative timing may apply to behaviors (e.g., language adoption) but also to values or identification (Telzer, 2010). For example, a faster adoption of host culture values by adolescents (acculturative pace, e.g., with regard to romantic relationships) and/or when adolescences adopt the values earlier and to a greater extent (relative timing) may cause more family conflicts than slower or lesser adoption of host values (Schwartz, Unger, Baezconde-Garbanati, et al., 2015). Such findings indicate that the consideration of acculturative dynamics can advance the theory on adolescents' active role in the family and may offer potential for innovation by shedding some light on how (differences in) acculturative changes are related to adolescents' active role and family outcomes (R. M. Lee et al., 2020; McBrien, 2005).

1.5 Language Use and Immigrant Adolescents' Active Role in the Family

While investigating adolescents' active role in family adaptation, this dissertation predominantly focuses on processes that are, at least to some extent, related to language skills

(e.g., language brokering and host language adoption). Host language use is a central variable in acculturation research because language competency is a crucial aspect of navigating the daily demands of living in a new society and can ease the overall sociocultural adaptation (Kim, 2017; Lindner et al., 2020). In this respect, language is not just a communication tool but also a vehicle transporting identity, values, and understanding to another culture (Caldas, 2002). Further, the process of language acquisition is highly dynamic and, among others, dependent on a person's age (Masgoret & Ward, 2006). In childhood and adolescence, learning a new language occurs simultaneously with cognitive maturation and socialization, easing language acquisition considerably. Adults, on the other hand, have to learn new words for concepts for which they have already developed cognitive structures, and their brain does not have the necessary plasticity to acquire a new language at the same pace and to the same level as children (Birdsong & Vanhove, 2016). By attending school, youths are also more closely embedded into the host society, which can increase the necessity to adopt the host language and the occasions of its use. As a result, research has consistently confirmed the existence of intrafamilial differences in host language adoption, with adolescents being more proficient (Weisskirch, 2020). Adolescents' linguistic advantage also makes it more likely that they will become the sender rather than the receiver of information in families and may therefore foster adolescents' active role in family adaptation processes. As a result, language acquisition may play a major role in explaining adolescents' direct and evocative influence on family adaptation and make language use an ideal variable to study family dynamics in acculturation processes.

1.6 This Dissertation

1.6.1 Superordinate Goal

The theoretical introduction of this doctoral research aimed to provide an overview of immigrant youths' general adolescent and acculturative development in a new society and within the family context. In this respect, research has emphasized immigrant adolescents' active agency in their own and their families' development and adaptation, but the findings are still too limited to draw a comprehensive picture. The overarching goal of this dissertation was to investigate immigrant adolescents' active role in familial adaptation processes and to determine how it is related to adolescent and family psycho-socio-cultural adjustment. Accordingly, this doctoral research also strived to derive implications for the successful development of adolescents and their families in a new environment. Because of adolescent–parent discrepancies in perceptions of family issues, studies investigating such family interactions have often been criticized for using self-reports provided by single family members (De Los Reyes & Ohannessian, 2016). Therefore, in this dissertation, I include multi-informant data and combine them with person-oriented,

comparative, and multi-group approaches. Through the literature review in the previous chapters, I identified two main research gaps that lead to four specific research aims.

1.6.2 Research Gaps and Research Aims

The past research on the interdependence of adolescents' and families' adaptation processes was mainly guided by a rather passive view of immigrant adolescents. Although approaches have increasingly emphasized adolescents' active role in this regard, there is a lack of evidence and a comprehensive overview of how adolescents can be actively involved in family adaptation and interactions. Moreover, the majority of research on immigrant family dynamics has focused on challenges for the family, although adolescents' active agency may also offer opportunities for adolescent and familial adjustment. To address these gaps, I derived two forms of adolescents' active role in the family—direct and evocative adolescent influence—which lead me to the following two specific research aims:

Research Aim 1: Examine adolescents' active role in families and how it is related to the families' psycho-socio-cultural adaptation by focusing on two forms of adolescent influence:

- a. Direct adolescent influence on the family;
- b. Evocative adolescent influence on the family.

So far, little is known about the universality and specificity of adolescents' active role in family adaptation processes across diverse immigrant families. This applies to several factors, such as migration conditions or the acculturative timing, which might explain differences in relations of adolescents' active role and families' adjustment. Since previous research on immigrant families has mainly focused on a few ethnic groups and contexts, it is uncertain whether the findings are transferable to immigrant groups facing other migration conditions. Further, despite the consensus that acculturation is a dynamic developmental process of change, inter- and intraindividual variance in acculturation has often not been adequately addressed in immigrant family research. Such gaps limit the understanding of whether adolescents' active participation in families' adaptation is a universal immigrant family process or specific to particular families or conditions. These limitations lead to the following two specific research aims:

Research Aim 2: Examine whether processes regarding adolescents' active role and its relations with families' psycho-socio-cultural adjustment are universal or specific to certain immigrant families. Specifically, to identify processes that are potentially

universal (indications for transferability to diverse immigrant families) or specific (only applying to particular immigrant families), I aim to investigate two key factors in immigrant family acculturation:

- a. Migration conditions;
- b. Timing of acculturation processes.

1.6.3 Study Overview and Connection to Research Aims

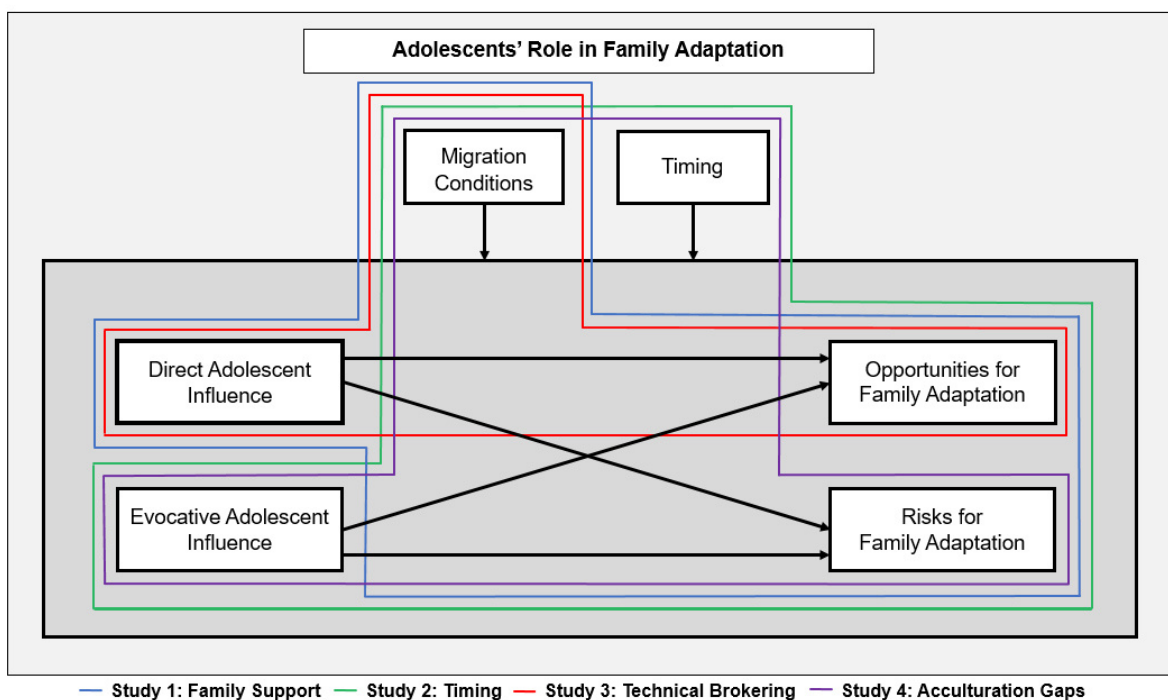
To achieve my research aims, I conducted four empirical studies based on three data sets of first- and second-generation immigrant adolescents and their families. One data set additionally comprised native adolescents. The empirical studies were based on secondary data analysis. Secondary analysis provided the opportunity to answer my research questions using large-scale data sets that included multi-informant family data from various underrepresented immigrant groups in different receiving societies. Using these existing data sets thus allowed me to examine my research questions in different samples while tapping the full potential of the collected data and saving resources (Donnellan & Lucas, 2013). Chapters 2 and 4 are based on cross-sectional data from German immigrant and native Swiss adolescents in Switzerland (Data Set 1). Chapter 2 additionally draws on data from native adolescents in Germany, which were part of a longitudinal research project (Data Set 2). I used another subsample of this longitudinal research project in Chapter 3, which investigates diaspora immigrant parent–adolescent dyads from the former Soviet Union in Germany across three waves. Chapter 5 uses one more group- and context-comparative data set of diaspora immigrant parent–adolescent dyads from the former Soviet Union (Data Set 3) who migrated to Germany (ethnic German repatriates) and Israel (Russian Jews). Hence, this dissertation focuses on adolescents and their parents of five ethnic groups (native Germans, native Swiss, German immigrants, ethnic German repatriates, Russian Jews) in three contexts (Germany, Israel, Switzerland).

First, I investigated immigrant and native adolescents' direct support for their families by providing three types of family support, a form of direct adolescent influence (Chapter 2, addressing Research Aim 1a). Moreover, this study focused on the positive and negative outcomes of this direct adolescent influence on the family for adolescents' psycho-social adjustment (adolescent self-efficacy and exhaustion). In addition, I investigated whether these family processes differed between ethnic groups and contexts (addressing Research Aim 2a). In the next study, I considered how the timing of diaspora immigrant adolescents' acculturation is related to positive and negative family interactions (child disclosure and family hassles), indicating evocative adolescent influence (Chapter 3, addressing Research Aims 1b, 2a, & 2b). In

the next two studies, I focused on either the opportunities or the challenges of adolescents' active role in family adaptation in understudied immigrant groups. In the third study, I investigated technical and culture brokering in immigrant and native families and how this direct adolescent influence is related to families' adaptation to a new society (Chapter 4, addressing Research Aims 1a & 2a). In the last study, I studied how differences in parental and adolescent acculturative development can harm family relationships. This study again addressed evocative adolescent influence on the family (Chapter 5; addressing Research Aims 1b, 2a, & 2b). The following figure (Figure 1) is a conceptual model that exemplifies my research proposal and summarizes my research aims. In addition, it illustrates the way in which the presented studies address them. Afterwards, I provide short summaries of the respective chapters and clarify the connection to my research aims in more detail.

Figure 1

Conceptual Model Summarizing the Research Aims and the Connection to the Studies of This Dissertation



Study 1: Why do Youth Support Their Families? A Person-Oriented Approach in Migrant and Native Families

Study 1 is based on two data sets (Data Sets 1 & 2) that comprise native German, German immigrant, and native Swiss adolescents in Germany and Switzerland. I investigated three components of adolescents' family support (emotional and instrumental support, unfairness of responsibility assignment), a well-known direct adolescent support behavior in families, with regard to its generalizability across the three ethnic groups, its origins in migration, culture, and context, and its potential for adolescents' psycho-social adjustment. Thus, this study addressed Research Aims 1a and 2a.

Using a person-oriented approach, I hypothesized that I would find at least two subgroups (low and high family support subgroup), which I expected to vary in components of family support. Due to migration-specific and contextual demands, I expected the likelihood of providing high levels of family support to be higher among immigrant adolescents and among (immigrant and native) adolescents in Switzerland. The identification of context characteristics and migration-specific factors that can explain membership of family support subgroups addressed Research Aim 2a. I further expected adolescents in the high family support subgroup to report higher levels of self-efficacy but also higher levels of exhaustion than adolescents in the low family support subgroup (addressing Research Aim 1a).

Analyses revealed three family support subgroups (low, medium, and high family support subgroup) across ethnic groups that differed primarily in the level of emotional and instrumental support provided to parents. Surprisingly, migration was only associated with the medium family support subgroup and not the high family support subgroup. The context Switzerland was associated with a higher likelihood of membership in the medium and high family support subgroups (independent of the migration background). Notably, this study showed high levels of direct adolescent support in immigrant and native families. Moreover, the analyses revealed that adolescents' family support has the potential to foster their positive development since the high family support subgroup reported the best psycho-social adjustment in the form of the highest level of adolescent self-efficacy but low levels of adolescent exhaustion. Study 1 further highlights the importance of the contexts in which adolescents develop and sheds some light on the interplay of culture, context, and migration in adolescents' and families' adaptation processes. However, the study does not address the dynamic character of adolescents' acculturation. Study 2 closes this gap and specifically examines relations between adolescents' acculturative timing and family interactions.

Study 2: Acculturative Change: Striking a New Path to Study the Adaptation Processes of Immigrant Adolescents and Their Families

In Study 2, I used recently introduced concepts of acculturative timing (acculturative pace and relative timing) to investigate trajectories of adolescents' German language use and its associations with family interactions over three waves in a sample of ethnic German immigrant parent–adolescent dyads in Germany (Data Set 2). Changes within families due to adolescents' acculturative development indicated evocative influence. Hence, this study addressed Research Aim 1b.

Based on previous findings on the interplay of acculturation-related changes and family interactions, I expected an accelerated pace and advanced relative timing of adolescents' host language use to be related to changes in family relationships (child- and parent-reported child disclosure and family hassles). That is, this study captures adolescents' and parents' perspectives on adolescents' acculturative change. Moreover, I hypothesized pace and relative timing of host language use to be more strongly related to family interactions in early stages of the acculturation process (i.e., a short length of residence). The consideration of different timing aspects of acculturation addresses Research Aim 2b, whereas the focus on the understudied group of diaspora immigrants targets Research Aim 2a.

Analyses revealed that acculturative pace of adolescents' host language use was the strongest predictor of changes in family interactions, particularly among families that had immigrated more recently. Study 2 thus provides insights into the developmental character of acculturation and highlights that differences in adolescents' acculturative trajectories may be decisive for explaining different family outcomes of adolescents' active and independent acculturation. However, this study does not delve deeply into how adolescents can support their family's integration into the new society by adopting an active role. This is the focus of Study 3.

Study 3: Adolescents' Technical and Culture Brokering in Immigrant and Native Families

Study 3 is based on a data set comprising German immigrant and native Swiss adolescents in Switzerland (Data Set 1). I comparatively investigated levels of adolescents' technical brokering among immigrant and native adolescents and their relations with host culture adaptation processes and maintaining contact with friends and family abroad in the immigrant group.

Because of the salience of new communication technologies for immigrant families in host and ethnic culture issues, I assumed that technical brokering, a form of direct adolescent

influence on families, would be higher among German immigrant than among native Swiss adolescents. Focusing on the immigrant group, I explored predictors of technical brokering, including family difficulties in adaptation, orientation toward the host culture, and culture brokering. Further, I assumed that adaptation difficulties would strengthen the association between different forms of direct adolescent influence on the family (culture and technical brokering). In doing so, I targeted Research Aims 1a and 2a.

The analyses in Study 3 provided insights into how adolescents can directly support their family in mastering the transition to a new country as predictors pertaining to culture brokering, adaptation difficulties, and host culture orientation best explained differences in technical brokering. Thus, this study complements an often deficit-oriented view of immigrant youths with a view on their active and constructive role in families. Moreover, it highlights the importance of adolescents' support in different family and life domains for family adaptation. However, whereas this study only focused on adolescents' reports, Study 4 adds to these findings by studying families' acculturation from both a parental and an adolescent perspective.

Study 4: Acculturation Gaps in Diaspora Immigrant Adolescent–Mother Dyads: The Case for a Domain-, Group and Context-Specific View on Family Adaptation

In Study 4, I investigated intergenerational acculturation gaps and their implications for family communication in two groups of diaspora immigrants from the former Soviet Union across two receiving societies (ethnic German repatriates in Germany and Russian Jews in Israel, Data Set 3). Investigating mother–adolescent dyads of two underrepresented immigrant groups in two different contexts, this study investigated the generalizability of previous findings on the interplay of adolescent and parental acculturation across dimensions and domains of acculturation (host and ethnic language and identification).

Whereas I expected acculturation gaps in language acculturation to be in the same direction as in other immigrant groups studied (adolescents reporting higher host and mothers higher ethnic language competence indicating a universal effect), I expected to find diaspora-specific effects in identification, with adolescents identifying more closely with their ethnic culture than their mothers. Further, I assumed that mother–adolescent acculturation gaps would be associated with lower levels of child disclosure and explored group- and context-specific effects. The key focus of this chapter was therefore on investigating how different familial timings in the acculturation process can indirectly change family dynamics, depending on specific migration conditions. Thus, this chapter addresses Research Aims 1b, 2a, and 2b.

Analyses indeed revealed differences in intrafamilial acculturative timing, which were related to family relationships. Moreover, the results showed diaspora-specific effects in family adaptation, with adolescents identifying more closely with their ethnic culture than their parents, whereas language acculturation did not differ compared to other immigrant samples studied. Study 4 thus highlights the need to target the specific situation of immigrant groups more, taking into account the context of adaptation and considering family members' unique acculturation process to be able to identify universal and specific processes of adolescents' active and independent role in families and related family outcomes.

**2 Study 1: Why do Youth Support Their Families? A Person-Oriented Approach
in Migrant and Native Families**

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Note. Formatting has been adjusted, content is verbatim and has not been edited.

Aumann, L., & Titzmann, P. F. (2020). Why do Youth Support Their Families? A Person-Oriented Approach in Migrant and Native Families. *Journal of Youth and Adolescence*, 49(2), 506–519.

<https://doi.org/10.1007/s10964-019-01167-z>

Abstract

Previous studies have observed high levels of family support of migrant adolescents. However, whether culture, context or migration explain this phenomenon remained unclear. This study investigated family support in high SES migrant and native families and identified family support subgroups and predictors as well as implications of subgroup-membership. Participants comprised 165 native Swiss ($M_{age}= 15.9$ years, 60.6% female) and 136 German migrants ($M_{age}= 15.3$ years, 64.7% female) in Switzerland and 187 native Germans in Germany ($M_{age}= 15.3$ years, 54.8% female). A person-oriented multi-group latent-class analysis identified three family support subgroups, which differed particularly in levels of emotional and instrumental family support. Migration was only associated with the medium family support subgroup, whereas family and context characteristics were associated with the high family support subgroup. Furthermore, the high family support subgroup reported the best psychosocial adjustment. These findings highlight that addressing different developmental contexts with person-oriented approaches can provide new insights in the understanding of adolescents' adaptation processes.

Keywords: family support, adolescents, migrants, psychosocial adjustment, comparative, latent-class analysis

Introduction

According to the United Nations, fourteen percent of all migrants were under eighteen years of age in 2017, a number that will likely increase in the coming years (UN, 2017). Thus, it is of major scientific but also public value to identify factors that promote a successful development of adolescents with immigrant or minority backgrounds. Promising approaches in this respect focus on developmental contexts of adolescents and particularly the family context (Suárez-Orozco et al., 2018). Immigrant adolescents have been found repeatedly to provide high levels of support to their families – more than adolescents in native families do (Titzmann, 2012). Most of the research on this topic, however, is conducted in collectivist, low SES groups (mostly in the US), and it remains uncertain whether the results are explained by migration, culture, or context (Wang & Miller, 2020). Further, most studies on family dynamics are limited to negative correlates of family support, so that potential positive implications of family support for the psychosocial development of adolescents may be underestimated (Shen et al., 2019). This study addresses this research gap by investigating family support in individualistic, high SES immigrant families in Switzerland compared to two native comparison samples, to assess immigrant-specific and general (migration-unspecific) factors of family support as well as positive and negative implications for adolescents' development.

German Migrants in Switzerland

Whenever the adaptation of immigrant adolescents is studied, it is important to provide some background for the migrating group. Studies on individualistic and high SES immigrant families are particularly scarce, although this type of migration is the most prevalent within Western Europe (Favell, 2008). Since ageing societies are in need of a qualified workforce, research has to provide these families with evidence based support that requires empirical results. German migrants in Switzerland represent individualistic, high SES migrant families with disproportionately high and accredited parental qualifications. In 2011, 71% of the German migrant population in Switzerland reported being highly educated (university entrance qualification or higher) with over 50% working as executives or in high academic positions (Eurostat, 2017). Moreover, most of them (more than 70%) migrated for economic reasons. Switzerland offers a high number of high quality and well-paid jobs that allow even those highly qualified migrants to further improve their standard of living (Engler et al., 2015). As a result, German migrants usually experience a socio-economic rise of status rather than a decline through the immigration to Switzerland. Even though Germany and Switzerland are characterized by comparable cultural (e.g., individualistic) values (Hofstede, 2001), German migrants in Switzerland report typical immigration-related phenomena: Families report language problems,

because Swiss-German is very different from standard German, and hassles of social integration and perceived discrimination. In addition, acculturation gaps are also documented with adolescents adjusting more quickly than their parents and adopting roles as culture brokers (Helbling, 2011).

Apart from characteristics of the migrating group, it is also vital to take the receiving context into account when studying German migrant families' adaptation in Switzerland (Bornstein, 2017). Switzerland is characterized by high demands on family-work-compatibility. According to the European Working Conditions Survey (EWCS) 2015, nearly 60% of Swiss adults specified having felt too exhausted after work to do the household chores. Furthermore, Swiss employees stated twice as often as German employees (64% vs. 30%) that their work mostly or always prevented them from devoting as much time as they would have liked to their families, which is also supported by the higher number of working hours per week in Switzerland (Eurofound, 2015). At the same time, childcare is primarily considered to be in the parents' area of responsibilities with the Swiss regime providing only few universal provisions such as public child care (Prince Cooke & Baxter, 2010). In addition, long lunch breaks in Swiss secondary schools without supervision and catering result in students spending this time at home caring for themselves or siblings (Vatter et al., 2004). These conditions are in contrast to what German migrant families were used to in Germany. Families in Germany face fewer demands on family-work-compatibility than families in Switzerland, as educational institutions and labor market policies are more family-oriented and offer, for example, more after-school childcare and full-day concepts (Ray, 2008).

German Migrant Adolescents' Family Support

Adolescents adopting (parental) responsibilities within the family is a frequent observed phenomenon and has been termed role reversal (Portes, 1997), parentification (Jurkovic, 1997) or role redistribution (Pedersen & Revenson, 2005). The common denominator for these concepts is that adolescents provide more support for their parents than would be expected given their age or family role. In this study the term *family support* was used to describe this behavior. This term is more appropriate for the presented research, because nearly all adolescents support their families in one way or another. *Family support* is a more descriptive and less judgmental term than other (e.g., clinical) phrases and is not primarily based in the immigration literature so that it can be used independently of ethnicity or minority background. Family support should also be distinguished from the concept of familism, which emphasizes the importance of referring to family for help, comfort, and services and of placing precedence on family before individual

interests. Familism may manifest through bonding with family members, considering family interests in decision making, or maintaining family cohesion (Behnke et al., 2008).

Adolescents' family support is considered a multidimensional construct (Pedersen & Revenson, 2005). Some components assess different types of support (instrumental family support, emotional family support) others assess how the support is perceived (perceived unfairness of family responsibility assignment). Recent research has shown that subgroups of adolescents based on behavior (e.g., based on profiles and levels of family support components) may reflect the variation between adolescents much better than mean-level comparisons of ethnic groups (Katsiaficas, 2018). With respect to family support, there may be subgroups of adolescents, who differ in their profiles across family support components, but these family support subgroups may or may not be associated with ethnic heritage or migration status. To identify subgroups of adolescents, studies applying person-oriented approaches are necessary but still small in numbers. Person-oriented approaches focus on individuals instead of variables and identify subgroups of individuals that are assumed to function similarly, whereas the mechanisms explaining outcomes can differ across subgroups. In contrast, the underlying assumption of variable-oriented approaches is that associations based on inter-individual differences reflect intra-personal processes that are similar across all individuals - an assumption that has been questioned (Bergman et al., 2003).

Due to a lack of research, it is unknown whether and how many family support subgroups may exist. Theoretically, at least two subgroups can be expected. In the first subgroup may be adolescents who provide little instrumental and emotional family support and are likely to perceive a low unfairness of responsibility assignment. The second subgroup may be adolescents who provide substantial instrumental and emotional family support and perceive a high unfairness of responsibility assignment. Although high instrumental and emotional family support may also be combined with low unfairness of responsibility assignment in some groups (e.g., LatinX or Asian families who are characterized by high family cohesion and support in terms of familism), this may not be expected in families from individualistic cultures, such as Germany or Switzerland (Behnke et al., 2008).

The description of German migrants in Switzerland provided earlier may suggest that German migrant adolescents are more likely to be in a subgroup that provides substantial amounts of family support. Whether, however, elevated levels of family support are due to intergenerational differences in cultural adaptation (an acculturation gap and its consequences) or due to contextual demands (high demands on family-work-compatibility in Switzerland) is not clear. Most research on family support so far was solely conducted on immigrant samples, and, thus, it is difficult to disentangle the receiving context from immigration-related factors. Hence, it

has been suggested to include native comparison samples in studies on immigrant samples (Wang & Miller, 2020). For research on German migrant families in Switzerland, two native samples are relevant; native families in Switzerland and native families in Germany. The inclusion of these samples allows the differentiation of contextual and migration-specific effects. If, for example, German migrant adolescents and native Swiss adolescents are overrepresented in the subgroup that provides substantial instrumental and emotional family support and perceives a high unfairness of responsibility assignment and native Germans are overrepresented in the subgroup that provides little instrumental and emotional family support and perceives a low unfairness of responsibility assignment, the contextual demands (e.g., high demands on family-work-compatibility in Switzerland) may be a driving mechanism for elevated levels of family support. If German migrant adolescents are overrepresented in the subgroup that provides substantial instrumental and emotional family support and perceives a high unfairness of responsibility assignment whereas native Swiss and native German adolescents are overrepresented in the subgroup that provides little instrumental and emotional family support and perceives a low unfairness of responsibility assignment, migration-specific effects (e.g., acculturation gaps) may be more prominent explanations.

Predicting Membership in Family Support Subgroups

Based on extant research, adolescents' membership in family support subgroups may be explained by context characteristics and migration-specific variables (Kosner et al., 2014). Current literature suggested that parental job engagement and culture brokering may be in particular decisive in the given context as well as demographic variables describing adolescents' developmental context.

Parental Job Engagement

Research has shown that adolescents' development takes place in constant interaction with its environment (Silbereisen et al., 1986) - for immigrants and natives alike. Families provide different contexts for adolescents, for instance based on parental economic and social job engagement (Portes et al., 2005). Although there are country-level differences in this regard depending on political family-work-compatibility, families within countries do also vary. High levels of parental job engagement have been shown to result in parents being unable to meet the demands of their family role due to their work role - a finding often described as work-to-family conflict. This behavior can lead to an emotional and/or behavioral withdrawal of a parent from family life so that adolescents (have to) provide higher family support (Michel et al., 2011). Further, a strong body of research has shown that parental job engagement is associated with the psychological adjustment of their offspring. Adolescents whose parents stated high job

engagement and high levels of work-to-family-conflict reported higher family involvement but also more intrafamilial conflicts, higher internal and external behavior problems, a less supportive relationship with their parents and reduced well-being (Goodman et al., 2011). Hence, adolescents whose parents report high job engagement may provide higher levels of family support. Parental job engagement is usually higher if parents report more working hours, and work in jobs with substantial responsibility. In addition, previous research has confirmed educational attainment as an important indicator of job engagement. For this reason, and in line with previous work, parental education was also included in the analyses (Greenhaus & Beutell, 1985).

Culture Brokering

Culture or language brokering in immigrant families refers to interpreting and translating between the language, cultural norms and behaviors of the host country and the country of origin that migrant adolescents perform for their parents (Tse, 1995). This behavior has to be differentiated from broader concepts of general family support as it is seen as a precursor rather than a correlate of general family support (Kam & Lazarevic, 2014). Brokering often is the result of adolescents' higher socio-cultural skills as compared to their parents and 90% of immigrant adolescents report such behavior at least occasional with substantial variability across families. Occasions and content of brokering can vary from the translation of school notes and important documents to being present in exchanges with authorities. Further, brokering often puts adolescents in immigrant families into meaningful positions in the family. Therefore, adolescents' role in the family hierarchy can shift resulting in adolescents' assuming more responsibilities and providing higher levels of family support (Trickett & Jones, 2007). As similar adaptation processes also occur in German migrant families in Switzerland, it can be assumed that German adolescents in Switzerland, who broker, may provide higher levels of family support.

Control Variables

This study also included demographic variables describing the adolescents themselves (e.g., age, gender) as well as adolescents' family situation (e.g., number of siblings) in the prediction of subgroup-membership. Including demographic variables such as adolescents' age (a proxy for adolescents' development of social and cognitive skills) is important in studies on immigrant adolescents as adolescence is a period with substantial biological, social, and psychological changes that may overlay or interact with acculturative processes and also affect family dynamics (Titzmann & Lee, 2018). Previous research has shown that with growing age adolescents report to provide higher levels of family support - possibly due to their more pronounced skills and competences (Hooper et al., 2014). Moreover, in families with fewer

siblings, single children or a family history of widowhood or divorce, adolescents may show higher family support, because there are simply fewer shoulders to distribute the work (Titzmann, 2012). Even if the nature of tasks often differs between genders, there is a strong body of research showing that in total female adolescents still contribute more to the household than male adolescents. This is confirmed in collectivistic cultures (such as LatinX in the US) with a strong gender role orientation (Garcia-Retamero & López-Zafra, 2009) but also in individualistic cultures (Lachance-Grzela & Bouchard, 2010). Therefore, female adolescents may show higher levels of family support than male adolescents. Finally, research on family interactions indicated that adolescents in a trusting parent-adolescent relationship tend to discuss their everyday lives more frequently and openly with their parents, which also includes their role in the family (Keijsers et al., 2010). Therefore, child disclosure, a well-proven marker for a trusting parent-adolescent relationship (Stattin & Kerr, 2000), may be associated with lower levels of family support, because adolescents do communicate their situation and needs to a greater extent.

Correlates of Family Support Subgroup-Membership

Apart from characteristics explaining family support subgroup-membership, the correlates of this phenomenon for adolescents' psychosocial development are still unclear (Shen et al., 2019). In itself, adopting some tasks in the family is a normative developmental process for all youth independent of migrant or native background. A moderated and supervised amount of developmentally appropriate responsibilities seems to promote adolescents' development, as it appears to add to character building, increasing autonomy, and higher sense of responsibility (e.g., Hooper, 2011). However, research on family support in terms of role reversal or parentification has also identified negative outcomes suggesting that family support can be disadvantageous (Wang & Miller, 2020). One mechanism linking family support and detrimental outcomes is that family support may cause strain for the adolescents and hinders them in the successful solution of age-typical developmental tasks (Telzer & Fuligni, 2009). For migrant youth, the negative implications may be even more pronounced, because family support may interfere with developmental and acculturative tasks (Titzmann & Lee, 2018). This is particularly problematic in adolescence, when the family should be a core source of social and emotional support for adolescents and a secure base for their exploration and autonomy development (Shortt et al., 2010). Nevertheless, some studies already demonstrated that solely looking at the risks might be misleading: Family support can improve adolescents' abilities in coping with adversity or trauma, shape social and emotional development, and improve practical and relationship skills. Further, managing family responsibilities may lead to adolescents' recognizing their potential and proficiency and may enable them to benefit from these responsibilities (Titzmann, 2012). In

addition, particularly in immigrant or minority families in the US such as LatinX families, it was found that high family support of adolescents in terms of familism goes hand in hand with stronger family cohesion, closer parent-child relationships and better health (Updegraff et al., 2005). Evidence up to now suggests that family support can lead to, for example, higher exhaustion but also higher self-efficacy. These effects of family support on youth development do not appear to be migration-specific, as similar results have already been found among migrant and native adolescents. However, it is important to stress that it is difficult to know correlates of family support in high SES families as empirical studies in this regard are still small in numbers. Since there are no theoretical or empirical objections, it is assumed that high SES migrant and native adolescents experience family support in a similar way as compared to previously studied adolescents with adolescents who provide high levels of family support reporting higher self-efficacy but also higher exhaustion than adolescents who provide lower levels of family support.

Current Study

The first aim of this study was to identify family support subgroups and to find out, whether membership in these subgroups was associated with migration status. This research aim was addressed by using a person-oriented research design, because adolescents may be better represented by group-membership based on their behavior and less in accordance to their ethnicity. The behavior on which the formation of subgroups was based were three components of family support (instrumental family support, emotional family support, unfairness of responsibility assignment). Based on the variance in family support that was demonstrated in earlier studies, at least two subgroups of adolescents across the three ethnic samples were expected (Hypothesis 1a): Adolescents who provide substantial instrumental and emotional support for their families and perceive a high unfairness of responsibility assignment (high family support subgroup) and adolescents who provide little instrumental and emotional support for their families and perceive a low unfairness of responsibility assignment (low family support subgroup). These subgroups were expected to vary in instrumental and emotional family support as well as unfairness of responsibility assignment. However, given the novelty of this approach in assessments of family support, analyses may also reveal more subgroups. Due to additional migration-specific demands, the likelihood of being in the high family support subgroup was expected to be higher among migrant adolescents (Hypothesis 1b). In addition, as a result of the context-specific demands (high demands on family-work-compatibility) in Switzerland, the likelihood of being in the high family support subgroup was expected to be higher among adolescents in Switzerland independent of an immigrant background (Hypothesis 1c).

The second research aim was the identification of factors that can explain membership in family support subgroups. In this regard, previous studies have pointed to the importance of context characteristics, and migration-specific variables as well as demographic variables. It was expected that adolescents with parents with high job engagement (Hypothesis 2a), older adolescents (Hypothesis 2b), adolescents with less siblings/single children (Hypothesis 2c), adolescents who live in single-parent-households (Hypothesis 2d), adolescents who have female gender (Hypothesis 2e), and adolescents who report low child disclosure (Hypothesis 2f) should more likely be in the high family support subgroup. In this study, the assessment of culture brokering was only appropriate for migrant adolescents and their families. Thus, among German migrants, the likelihood of being in the high family support subgroup was expected to be higher among those migrant adolescents who act as culture brokers (Hypothesis 2g).

In addition, this study also aimed at identifying psychosocial correlates of membership in family support subgroups. Previous research has shown that family support can be beneficial or detrimental for adolescents' development and, most notably, may be a double-edged sword with both positive and negative effects going hand in hand. Hence, it was expected that the high family support subgroup reports higher self-efficacy (Hypothesis 3a) but also higher levels of exhaustion (Hypothesis 3b) than the low family support subgroup.

Methods

Participants

The sample comprised three samples of adolescents in two countries: German migrant and native Swiss adolescents in Switzerland and native German adolescents in Germany. The data originated from two projects: "Adolescent Immigrants from Germany in Switzerland: Challenged or fostered?" funded by the Foundation Suzanne and Hans Bäsch and "Culture-brokering as Opportunity and Risk for Adolescent Immigrants" funded by the Jacobs Foundation. Data collection in Switzerland took place in nine schools in Kanton Zurich, supported by the education authority of the canton in 2013/14. Participants in Germany were randomly selected from registry data in three German cities in 2010/2011. Participation in the study was voluntary. It was also declared to all participants that they were free to withdraw their consent to participate at any time without expecting negative consequences. Inclusion criteria for participation were the age of the adolescents between 12 and 18 years, and, for German migrants in Switzerland, a migration of the adolescents themselves or their parents (before adolescents' birth) from Germany to Switzerland. Native Swiss and native Germans who described themselves as foreigners were excluded. Based on these criteria 23 adolescents were eliminated before the analyses. The final sample comprised 488 participants: 165 native Swiss and 136 German

migrant adolescents in Switzerland and 187 native German adolescents in Germany. Table 1 shows the demographics of the three samples, which were highly comparable on demographic variables.

Measures

Participants in Switzerland completed well-established, standardized questionnaires with an online tool in the computer rooms of each school or in paper-pencil format. Native German adolescents answered the same standardized questionnaires only in paper-pencil format. All questionnaires were in German, since this is the official language for all participants. Although the data collection for all participants took place in their native language, it was tested for measurement equivalence to eliminate cultural/contextual differences in the understanding of items. Analyses across the three samples by using exploratory factor analyses and congruence coefficient Tuckers Phi (van de Vijver & Poortinga, 2002) showed a very good fit for all scales ($\phi \geq .99$). This study also verified measurement equivalence across three age groups – early (12 - 14 years), middle (15 – 16 years) and late (17 – 18 years) adolescence - to ensure that adolescents understand the items the same regardless of their stage of development since constructs can change during developmental phases (Blakemore, 2012). Analyses across age groups also showed a very good fit for all scales ($\phi \geq .99$).

Family Support

Adolescents' family support is considered a multidimensional construct (Pedersen & Revenson, 2005). Two quantitative components and one qualitative component derived from existing research were examined in this study: adolescents' instrumental family support, emotional family support, and unfairness of family responsibility assignment, which were based on earlier instruments (Jurkovic & Thirkield, 1998; Mika et al., 1987). Adolescents completed the items on a six-point-Likert scale from "strongly disagree" to "strongly agree". *Instrumental family support* refers to domestic-related responsibilities, such as assisting parents in financial decision-making, and was assessed with the mean of seven items, such as "My parent(s) let me have a lot of influence when making important adult decisions". The alpha consistency of this scale was high in all three samples (native Swiss: $\alpha = .82$; German migrants: $\alpha = .72$; native Germans: $\alpha = .71$). *Emotional family support* refers to support in the regulation of parental emotions, such as dealing with family conflicts or the emotional replacement of a parent's partner and was assessed via the mean of four items, such as "I restored peace if conflicts developed between my parents". The scales revealed sufficient reliability in the three samples (native Swiss: $\alpha = .72$; German migrants: $\alpha = .73$; native Germans: $\alpha = .63$). *Unfairness of responsibility assignment* comprises the feeling of assuming more than the fair proportion of responsibilities in

comparison to other family members or receiving too little appreciation for the provision of family support and consisted of three items, for example “In my family I am often asked to do more than my fair share”. The alpha consistency of this scale was sufficient in all samples (native Swiss: $\alpha = .63$; German migrants: $\alpha = .63$; native Germans: $\alpha = .61$). Qualitative aspects such as the perceived unfairness of responsibility assignment are just as important as the quantity and type of responsibilities that adolescents adopt as supporting the family can have a different significance for adolescents, for instance for cultural reasons (Fuligni et al., 1999).

Context Characteristics

Adolescents' living-country was identified on the basis of the different countries of data collection. Parental job engagement was rated separately for parents, from 0 (*no work*) to 4 (*occupations with high responsibility and self-employment*). To measure parental educational attainment, adolescents indicated the highest level of maternal and paternal completed education on an internationally comparable scale (International Standard Classification of Education [ISCED]) ranging from 0 (*No school leaving qualification*) to 5 (*Doctoral degree*).

Migration-Specific Variables

The status migrant/native was identified by the questionnaires. Culture brokering was measured with six items (adapted scale of Trickett & Jones, 2007), such as “How often did you schedule appointments for your parents because you know the language or the Swiss culture better?”. Adolescents responded using a six-point-Likert scale ranging from “never” to “very often”. The alpha consistency of this scale was high among German migrants ($\alpha = .86$).

Control Variables

Adolescents reported their age, gender, number of siblings and if they live in a single-parent household in answer to four simple questions in the questionnaire. Child disclosure was measured using a scale from Stattin and Kerr (2000). It comprised five items such as “Do you keep a lot of secrets about what you do during your free time?” and items were rated on a six-point-Likert scale ranging from “never” to “always”. The scale's reliability was high in all three samples (native Swiss: $\alpha = .72$; German migrants: $\alpha = .75$; native Germans: $\alpha = .74$).

Self-Efficacy

Adolescents' self-efficacy was measured with ten items (Schwarzer & Jerusalem, 1995), such as “When I am confronted with a problem, I can usually find a solution”. Adolescents responded using a six-point-Likert scale ranging from “not at all true” to “absolutely true”. The

alpha consistency of this scale was high with $\alpha = .88$ among native Swiss and German migrants and $\alpha = .89$ among native Germans.

Exhaustion

Adolescents' level of being overwhelmed and exhausted was assessed via the mean of ten items (Lotz, 1984). The scale also showed its validity in a sample of immigrants in Germany (Titzmann, 2012). Items included statements such as "I feel that I cannot cope anymore with the many tasks I have to do" and were rated on a four-point-Likert scale ranging from "not at all true" to "absolutely true". The alpha consistency of this scale was high in all three samples (native Swiss: $\alpha = .88$; German migrants: $\alpha = .88$; native Germans: $\alpha = .87$).

Table 1

Means, Standard Deviations, and Proportions of the Variables in Ethnic Samples

	native Swiss M (SD)	German migrants M (SD)	native Germans M (SD)
N	165	136	187
Age	15.9 (1.5) ^a	15.3 (1.8) ^b	15.3 (2.1) ^b
Female gender	60.6%	64.7%	54.8%
Number siblings	1.6 (1.0)	1.5 (0.9)	1.4 (1.2)
Maternal educational attainment	2.2 (1.2) ^a	2.7 (1.3) ^b	2.4 (1.1) ^a
Paternal educational attainment	2.3 (1.2) ^a	2.9 (1.3) ^b	2.4 (1.1) ^a
Maternal job engagement	2.0 (1.3) ^a	2.0 (1.3) ^a	1.8 (1.2) ^b
Paternal job engagement	2.7 (0.9) ^a	2.9 (0.9) ^b	2.3 (1.1) ^c
Length of residence (in years)		10.2 (5.0)	

Note. ^{a b c} Means of these variables are significantly different between the samples with different characters representing mean differences $p < .05$

Results

As a preliminary step, all variables were tested for missing data. Missing values in all constructs were handled by the Full Information Maximum Likelihood algorithm (Newman,

2014). Thus, cases with missing data were not excluded, but all variables were estimated based on the cases with complete data and the (conditional) missing values. As compared to listwise deletion, the benefit of the chosen procedure is that it does not lead to the common disadvantages, such as losing statistical power or biased parameter estimation (Graham et al., 2003).

In the first hypothesis it was expected to find at least two family support subgroups, which differ in their profiles of family support (Hypothesis 1a). To identify the number and nature of subgroups across ethnic samples, a multi-group latent class analysis (MGLCA) was conducted using MPLUS 8.3. Selection of the optimal number of subgroups was based on several statistical fit indices, including the Bayesian information criterion (BIC), the Sample-Size Adjusted BIC (aBIC) and the entropy. Preference should be given to the best-fitting model with the fewest classes (Williams & Kibowski, 2016). The analyses yielded an optimal number of three subgroups independent of adolescents' ethnicity – a low and a high family support subgroup and a third subgroup in between entitled medium family support subgroup (Table 2 & Figure 1). Table 3 shows the demographics and summary of variables of the three subgroups.

Between subgroups mean levels of family support components differed significantly and the three subgroups differed in size. While the low and medium family support subgroup showed a quite similar incidence with comprising 41.6% and 47.5% of all adolescents studied, the high family support subgroup was less frequent with including 10.9% of adolescents studied. Since analyses revealed three subgroups of adolescents, Hypothesis 1a was partly confirmed: The analyses showed three subgroups that differed in level of family support components - the expected low and high family support subgroups, and a third group in between, entitled medium family support subgroup.

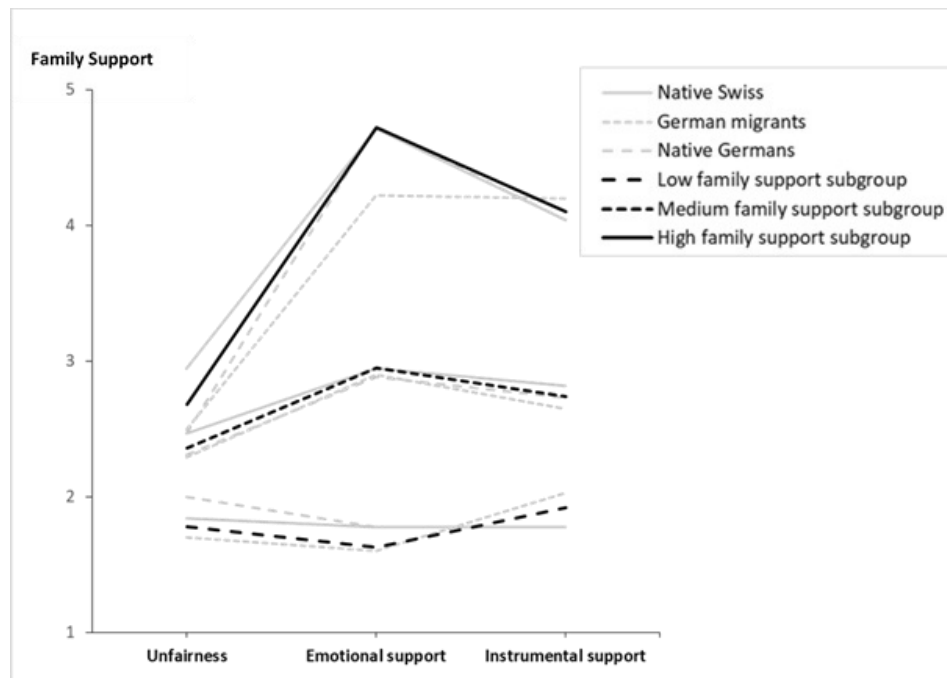
Table 2

Indicators of Fit for Models With Two Through Four Latent Classes

Model	BIC	aBIC	Entropy	n1	n2	n3	n4
2 classes	4955.38	4891.90	.90	348	129		
3 classes	4870.71	4788.19	.90	203	232	53	
4 classes	4870.19	4788.62	.86	192	202	70	13

Figure 1

Graphical Representation of Family Support Subgroups Across Ethnic Samples (Black Lines), and Separated by Ethnic Samples (Grey Lines)



The three subgroups differed in age, gender, child disclosure and parental job engagement (Table 3). Whereas older adolescents and females were overrepresented in the high family support subgroup, adolescents in the low family support subgroup reported higher child disclosure than the other two subgroups. In addition, adolescents in the low family support subgroup reported a significantly lower parental job engagement than adolescents in the medium and high family support subgroups. Further, Chi²-tests showed that the ethnic samples were not evenly distributed across the subgroups, $\chi^2(4, 488) = 129.96, p < .001$: Native Germans were overrepresented in the low family support subgroup, whereas native Swiss and German migrants were overrepresented in the medium and high family support subgroups (Table 3).

To predict adolescents' membership in family support subgroups (Hypotheses 1b-c, Hypotheses 2a-g) a multinomial regression in SPSS 26 was conducted. The dependent variable was membership in a family support subgroup (low, medium or high family support subgroup) with the low family support subgroup being chosen as the reference category. The overall model emerged as significant $\chi^2(18, N = 488) = 135.32, p < .001$ and explained 27% of the variance, *Cox & Snell R*² = .27. First, it was expected that migrant adolescents (Hypothesis 1b) and adolescents in Switzerland (Hypothesis 1c) may be more likely in the high family support

subgroup. The results presented in Table 4 show that being a migrant was significantly related to a higher likelihood of membership in the medium family support subgroup compared to low family support subgroup. In addition, living in Switzerland was significantly related to a higher likelihood of being in the high and medium as compared to the low family support subgroup. Thus, Hypothesis 1b (migration status) fitted the expectations and was confirmed for the medium family support subgroup. Hypothesis 1c (country Switzerland) was supported for the medium and high family support subgroup.

Table 3

Means, Standard Deviations, and Proportions of Demographics of Family Support Subgroups

	Low family support	Medium family support	High family support
<i>N</i>	203 (41.6%)	232 (47.5%)	53 (10.9%)
Native Swiss	45	96	24
German migrants	21	93	22
Native Germans	137	43	7
Age	15.3 (1.9) ^a	15.6 (1.7) ^a	15.9 (1.9) ^b
Female gender	58.9% ^a	56.9% ^a	73.6% ^b
Parental education	2.35 (1.1)	2.51 (1.1)	2.65 (1.0)
Parental job engagement	2.14 (0.9) ^a	2.34 (0.9) ^b	2.43 (0.9) ^b
Single-parent-household	17.3% ^a	22.1% ^a	35.3% ^b
Disclosure	4.02 (1.4) ^a	3.09 (1.2) ^b	2.78 (1.2) ^c
Emotional family support	1.63 (0.5) ^a	2.95 (0.6) ^b	4.72 (0.7) ^c
Instrumental family support	1.92 (0.6) ^a	2.74 (0.7) ^b	4.10 (0.8) ^c
Unfairness of responsibility assignment	1.78 (0.8) ^a	2.36 (0.9) ^b	2.68 (1.3) ^c
Self-efficacy	4.06 (0.8) ^a	4.06 (0.8) ^a	4.42 (0.8) ^b
Exhaustion	1.52 (0.5) ^a	1.67 (0.5) ^b	1.59 (0.5) ^{ab}

Note. ^{a b c} Means of these variables are significantly different between subgroups with different characters representing mean differences $p < .05$

In the second hypothesis parental job engagement, age, number of siblings, single-parent household, gender, child disclosure, and culture brokering were expected to be predictors of subgroup-membership (Hypotheses 2a–g). The predictor variables single-parent household, and number of siblings were significantly related to the likelihood of being in the low family support subgroup on the one hand, and the medium or high family support subgroup on the other, but results varied depending on the pairs of subgroups being compared (Table 4). Living in a single-parent household increased the likelihood of being a member of the high as compared to the low family support subgroup. A lower number of siblings increased the likelihood of membership in the medium as compared to the low family support subgroup. No effects were found for parental job engagement, age, gender, and child disclosure. In a next step the reference group was rotated and examined membership of being in the high as compared to the medium family support subgroup. Female gender and living in a single-parent household increased the likelihood to be a member of the high as compared to the medium family support subgroup (Table 4). In sum, Hypotheses 2c (siblings), Hypotheses 2d (single-parent-household), and Hypothesis 2e (gender) were supported for the medium or high family support subgroup. Hypotheses 2a (parental job engagement), 2b (age), and 2f (child disclosure) were not confirmed.

To test Hypothesis 2g (culture brokering), a second multinomial regression was conducted only in the German migrant group and culture brokering was added as predictor into the regression model. Culture brokering was independently related to a higher likelihood of membership in the medium and high family support subgroup (medium: $B = 2.23$, $Wald\ test = 5.57$, $Odd's\ Ratio = 9.33$, $p < .05$; high: $B = 3.04$, $Wald\ test = 9.75$, $Odd's\ Ratio = 20.99$, $p < .01$). When including culture brokering, the predictor single-parent household still remained significant in the prediction of high family support subgroup-membership ($B = 1.83$, $Wald\ test = 4.04$, $Odd's\ Ratio = 6.22$, $p < .05$). Thus, Hypotheses 2g (culture brokering) was supported.

The last set of hypotheses examined whether subgroups differed in their levels of self-efficacy and exhaustion (Hypotheses 3a & b). A MANCOVA, using the predictors of subgroup-membership as covariates, revealed that the subgroups differed in their levels of self-efficacy, $F(2, 474) = 3.14$, $p < .05$, whereas no significant overall difference was found for exhaustion, $F(2, 474) = 2.14$, $p = .12$. Pairwise comparisons showed that the high family support subgroup reported higher levels of self-efficacy than the medium and low family support subgroups, whereas the medium and low family support subgroups did not differ in their levels of self-efficacy (Table 3). In addition, the medium family support subgroup reported higher levels of exhaustion than the low family support subgroup. Concerning exhaustion, no other pairwise comparisons reached significance (Table 3). These results supported Hypothesis 3a (self-efficacy), whereas Hypothesis 3b (exhaustion) was not confirmed for the high as compared to the

low family support subgroup. However, results of the medium as compared to the low family support subgroup supported the expectation of Hypothesis 3b.

To validate the findings, alternative analyses tested the robustness of the results. Additional stepwise multinomial regression models tested whether the order in which predictors were introduced into the regressions modified the results, which was not the case. The analyses were also repeated with listwise deletion of missing values and, again, results did not differ. Furthermore, the birth order of siblings was included in addition to the number of siblings in an early step of regressions. There was, however, no significant contribution to the model and, hence, it was decided to not include the birth order in the final analyses, to avoid over-controlling (Bernierth & Aguinis, 2016).

Table 4*Predicting Family Support Subgroup-Membership (Multinomial Regression)*

	High family support			Medium family support			High family support		
		Wald test	Odd's ratio		Wald test	Odd's ratio		Wald test	Odd's ratio
	B	(z-ratio)	(95% interval)	B	(z-ratio)	(95% interval)	B	(z-ratio)	(95% interval)
(Constant)	-2.46	12.63					-1.85		
Age	0.33	2.87	1.39 (0.95 - 2.05)	0.19	2.15	1.21 (0.94 – 1.56)	0.14	0.66	1.15 (0.82 – 1.64)
Parental education	0.37	3.94	1.45 (1.01 - 2.09)	0.21	2.83	1.24 (0.97 – 1.59)	0.16	0.89	1.17 (0.84 – 1.63)
Parental job engagement	0.13	0.49	1.14 (0.79 – 1.66)	0.08	0.39	1.08 (0.84 – 1.39)	0.05	0.09	1.06 (0.75 – 1.48)
Number siblings	-0.33	2.77	0.72 (0.49 - 1.06)	-0.31	5.63	0.73* (0.57 - 0.95)	-0.01	0.01	0.99 (0.69 – 1.41)
Disclosure	-0.33	1.75	0.72 (0.44 – 1.17)	-0.01	0.01	0.99 (0.72 – 1.38)	-0.33	2.04	0.72 (0.46 – 1.13)
Gender	0.47	1.36	1.61 (0.72 – 3.57)	-0.25	0.99	0.78 (0.47 – 1.28)	0.73	3.86	2.07* (1.00 – 4.26)
Switzerland	2.24	11.41	9.42** (2.56 – 34.62)	1.93	27.35	6.86*** (3.33 – 14.11)	0.32	0.24	1.37 (0.38 – 4.96)
Immigrant	0.53	1.62	1.70 (0.75 – 3.88)	0.71	5.04	2.02* (1.09 - 3.74)	-0.17	0.24	0.84 (0.42 – 1.67)
Single-parent-household	1.23	8.68	3.41** (1.51 – 7.70)	0.50	2.55	1.65 (0.89 – 3.03)	0.73	4.18	2.07* (1.03 – 4.16)
	Reference group: low family support			Reference group: low family support			Reference group: medium family support		

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Discussion

Adolescent immigrant's family support plays a major role in the adaptation processes of their families. It is uncertain, however, whether immigrant adolescents' elevated levels of family support are explained by migration, culture or context (Wang & Miller, 2020), and whether this support can also relate to positive psychosocial outcomes (Shen et al., 2019). Moreover, although the diversity (ethnic background, SES) of migrating youth is increasing, most research addresses collectivist, low SES groups (mostly in the US). The primary aim of the current study was to identify subgroups of adolescents across high SES individualistic ethnic groups who differ in levels and profiles of family support (based on instrumental family support, emotional family support and unfairness of responsibility assignment). The study also examined whether a migration background, the national context, or family characteristics explain membership in family support subgroups and whether subgroup-membership was associated with positive as well as negative outcomes.

The first fundamental result of this study using a person-oriented multi-group latent-class analysis is the identification of three family support subgroups which differed in their profiles of family support (low, medium and high family support subgroups). Whereas adolescents of the low, medium and high family support subgroups reported substantial differences in emotional and instrumental family support, the level of unfairness of responsibility assignment was surprisingly similar across subgroups. Even the high family support subgroup did not report higher unfairness of responsibility assignment. This similarity may be understood in light of the predictors of membership in the high family support subgroup: living in families with a single-parent and the context Switzerland. Adolescents in single-parent households seem to emotionally replace a parents' partner (Hooper, 2011) a finding that was reflected in the highest levels of emotional family support in this subgroup. In this situation, adolescents may see family support as a meaningful social role that contributes to family functioning (Fuligni & Telzer, 2013). This ascribed meaning of their behavior may also be the reason why the high family support subgroup reported higher self-efficacy but no differences in levels of exhaustion as compared to the other two subgroups. However, the high family support subgroup is the smallest group of adolescents (only about 10% of the sample) and therefore these interpretations require further evidence in the future.

The medium family support subgroup was frequently represented with about 50% of all participants being a member of this subgroup. Adolescents in this subgroup reported elevated levels of instrumental and emotional family support as compared to the low family support subgroup. Membership in the medium family support subgroup was associated with fewer siblings or being a single child, the context Switzerland, and a migration status. Surprisingly,

migration background was only associated with higher likelihood of being in the medium family support subgroup, but not the high family support subgroup. Hence, the results seem to show that among German migrants in Switzerland a migration background only elevates levels of family support to a certain point, but not further. This result also points out the advantage of person-oriented approaches, because classic linear associations (e.g., the effect of immigration background on family support in the classic linear regression paradigm) would have missed this nuanced finding (Bergman et al., 2003). It remains an open question, however, whether the result is specific for the high SES German migrant sample with substantial resources, or whether this would also be found in other ethnic or migrant groups.

Considering the two elevated subgroups, female gender and living with a single-parent increased the likelihood of being a member of the high as compared to the medium family support subgroup. Neither a migration status nor the context predicted membership in the high as compared to medium family support subgroup. Hence, differences between memberships in the medium and high family support subgroup were primarily explained by demographics and family characteristics. This finding calls for more research on the rather small high family support subgroup: What are the dynamics of these families, how do the high levels of family support develop and why do these adolescents profit from them? In depth qualitative methods may give answers to these questions.

The low family support subgroup was also relatively common with about 40% of all adolescents in the study being a member of this group. Adolescents in this subgroup reported low levels of all three components of family support. Living with two parents, with siblings, as well as the context Germany predicted membership in this subgroup and migrant adolescents were significantly underrepresented among the low family support subgroup. Further, adolescents in the low family support subgroup showed lower self-efficacy than the high family support subgroup but also less exhaustion than the medium family support subgroup.

The presented results support theoretical models that emphasize the importance of adolescents' ecological environment for their adaptation (Bronfenbrenner, 1986). The context (Germany vs. Switzerland) was a strong predictor for medium and high family support subgroup-membership and even explained more variance than migration status. Thus, there seem to be conditions in the Swiss context that require adolescents to help and support their families to a greater extent than in Germany. Possibly, it is the demands on family-work-compatibility that are known to be more pronounced in Switzerland. The study cannot reveal, however, what factors exactly drive these elevated levels of family support in the Swiss context. Parental job engagement and parental education were assessed, but both did not reach significance in the predictions. An explanation may be that the occupational position per se does not affect the extent

to which work and parental roles interfere (Dickson et al., 2016). Hence, parental role conflicts in Switzerland may be reinforced by other processes. One such mechanism may be the challenging access to childcare in Switzerland (Prince Cooke & Baxter, 2010), which was, unfortunately, not assessed in this study. Alternatively, a cultural-historical perspective may explain the elevated levels of family support in Switzerland. Whereas Germany is a country of change and transformation with borders being reshaped almost every century, Switzerland has existed for several centuries, not only geographically. This may have translated in a more traditional and stable lifestyle in Switzerland with institutions and the general organization of everyday activities relying substantially on family members as providers of support (e.g., Stock et al., 2012). Context-comparative research would be necessary to understand how variations in contexts affect family relations (Benbow & Aumann, 2020).

Culture brokering, a migration-related predictor, was associated with membership in both the medium and high family support subgroups. This result corroborates findings that adolescents who report migration-specific helping tasks also adopt more general responsibilities within the family (Kam & Lazarevic, 2014a). More importantly, this study confirmed this effect in German migrants in Switzerland, a group with relatively many resources, good education, in an individualistic society. Hence, like migrant adolescents in less affluent conditions, German migrant adolescents seem to adjust more quickly to the local dialect compared to their parents (which is very hard to understand for people speaking standard German), may gain a deeper knowledge of Swiss habits and philosophy through school, and may use this knowledge to support their parents at home (Helbling, 2011). Nevertheless, family characteristics (e.g., dual vs. single-parents) explained variance in subgroup-membership in addition to culture brokering, a finding that highlights the fact that migration-related effects may be best studied in combination with general family-related experiences (Peris et al., 2008). A next step would be the investigation of the interplay of these variables to find out more about how acculturative or developmental processes are intertwined.

The identification of family support subgroups in the current study was based on a MGLCA. A MGLCA does not only identify subgroups across ethnic samples but also illustrates the identified subgroups within ethnic samples. Notably, in this study all three family support subgroups were confirmed across all three ethnic samples (Figure 1), albeit in different proportions. This result shows that a particular behavior may be less a matter of ethnicity, but may exist at various levels and in various patterns in many ethnic groups. Person-oriented methods are a tool to highlight this variability without overemphasizing ethnic differences.

All these results have to be seen against the backdrop of the specific immigrant group studied. This is one of the rare cases in which high SES immigrant families in an individualistic

context participated – a group that differs from more collectivistic low SES immigrant families in other studies (Fuligni & Pedersen, 2002). Studying such samples is becoming more and more important as the free movement within the EU is particularly taken up by highly educated persons and because this type of migration is the most prevalent within Western Europe (Favell, 2008). In addition, German migrants in Switzerland have to bridge a relatively small cultural gap between the countries. Hence, this group is able to challenge results that are typically attributed to migration experiences, because they have the migration experience without it being confounded with typical migration-related disadvantages.

The current study has further strengths such as the simultaneous inclusion of predictors pertaining to migration, context, and demographics and the inclusion of two highly relevant comparison groups, natives from the host (native Swiss) and the ethnic country (native Germans). This approach permits disentangling – at least to some extent - acculturative and general processes in the explanation of family support. Another strength is the assessment of quantitative and qualitative aspects of family support since subgroups reported high differences in emotional and instrumental family support, but only small differences in unfairness of responsibility assignment. The inclusion of both positive and negative correlates of family support was important, because the results suggested that the level of family support is not necessarily decisive for whether family support is beneficial or detrimental for adolescents' development.

Nevertheless, there are also some limitations future studies should address. A first limitation is the small cultural distance between Germany and Switzerland and the focus on high SES migrants alone. Comparative research comprising different types of immigrant groups, i.e., the comparison of high and low SES native and immigrant groups in contexts with small and high cultural distance, would be advisable to understand the impact of culture, socioeconomic resources and context-characteristics on family interactions (Benbow & Aumann, 2020). It is also important to mention that, despite substantial efforts, the current design could not fully disentangle the interaction of migration and context/country, as there were no Swiss migrants in Germany to be assessed. Further, the different formats of assessment (paper pencil vs. computer) may impact the results, which resulted from the fact that adolescents in Germany were randomly selected from registry data in various German cities and not via school enrolment as in Switzerland, so that only a data collection by post was feasible. Nevertheless, since both are written formats and since measurement equivalence across ethnic groups was established, there is no reason to believe that the results are biased based on this difference. Another limitation is that only adolescents were studied, but not their families. As the performance of family support not only depends on the adolescents but also on the behavior of other family members, such as parents or siblings, it would be insightful to involve these family members in further research to

holistically understand this interplay of members within a family. With regard to the correlates of family support for the psychosocial development of adolescents, it is necessary to note that differences in self-efficacy and exhaustion may not only be explained by belonging to family support subgroups, but also may depend on many other possible constructs. However, as the analyses were controlled for a number of variables (including age, gender, family constellation) it can be assumed that the variance in family support does contribute to these differences.

Nevertheless, these findings are just correlational and future research may study the association of family support and outcomes of such behavior in a more dynamic manner. Finally, the study was only cross-sectional, so that it is not possible to conclude how robust subgroup-memberships are, how adolescents become part of a subgroup, and whether family support is a stable behavior at all. Future longitudinal assessments and, even better, intervention research may be more informative. An interesting point in this regard may be, for example, addressing the family-work-compatibility. It might be useful to investigate whether interventions facilitating the balance of work and family life have an impact on family support subgroup sizes (e.g., in Switzerland). First results already showed that parents with more flexible working hours, as one measure for a better family-work-compatibility, can better arrange their work in such a way that they match their hours to their families' and children's needs and resulted in improved parenting and parent-child relationships (Roeters et al., 2010).

Conclusion

Existing literature has well documented the role immigrant adolescents play in supporting their families, but the understanding of this phenomenon is still limited with regard to its generalizability across different ethnic and minority groups, its origins in migration, culture, or context, and its potential for adolescents' successful adaptation. In contrast to the vast majority of other studies, this comparative study examined family support in high SES migrant and native adolescents in an individualistic context (German migrants in Switzerland and two relevant native control groups), in order to shed some light on the interplay of culture, context and migration in adolescents' family support. Person-oriented analyses revealed three family support subgroups (low, medium, & high family support subgroup) that differed primarily in the level of emotional and instrumental support provided to parents. These three subgroups were found across all ethnic groups, with immigrants being overrepresented in the medium family support subgroup. The context Switzerland was associated with a higher likelihood of membership in the medium and high family support subgroup (independent of migration background). Furthermore, this study showed that family support has the potential to foster positive youth development, as the high family support subgroup reported the highest level of self-efficacy. The results strongly highlight

the importance of contexts in which adolescents develop. Working conditions on a national level and the situation in the family seem to significantly affect the role adolescents play in their families. The good news is that such family responsibilities can also strengthen some of adolescents' developmental outcomes. Future research may profit from addressing the interplay of person and environment and from the disentangling of culture, contextual conditions, and migration-related experiences. Oversimplifications and misguided attributions of observed behaviors can only be avoided with such an understanding. Given the rapidly increasing migratory flows around the globe, this will be decisive in creating developmental opportunities for migrant youth.

3 Study 2: Acculturative Change: Striking a New Path to Study the Adaptation Processes of Immigrant Adolescents and Their Families

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Note. Formatting has been adjusted, content is verbatim and has not been edited.

Aumann, L., Titzmann, P. F. & Lee, R. M. (2021). Acculturative Change: Striking a New Path to Study the Adaptation Processes of Immigrant Adolescents and their Families. *Manuscript submitted for publication.*

Abstract

Investigating the adoption and use of the host language is common method for studying acculturation among immigrants. What is less known is how this type of acculturation changes over time and how individual patterns of change can affect other adaptation processes in the host country, for example within families. This study investigated immigrant adolescents' host language use by applying two recently introduced concepts of acculturative change, pace (the speed in which one acculturates) and relative timing (one's acculturation level relative to co-ethnic peer acculturation levels), and its relation with family interactions (child disclosure, acculturation-related family hassles). Data comprised a 3-wave-longitudinal sample of 378 ethnic German immigrant parent-adolescent dyads from former Soviet Union in Germany (adolescent $M_{age}=15.7$, 62% girls). Latent True-Change models were used to model pace of acculturative changes between waves. Structural equation analyses revealed that acculturative pace in language use predicted family interactions over time: Pace between Wave 1 and 2 predicted child disclosure, pace between Wave 2 and 3 acculturation-related family hassles. Associations were stronger among recently immigrated families. Relative timing was not related to family interactions at all. The results highlight that understanding the dynamics in immigrant adolescents' acculturation can explain differences in family functioning. Thus, insights into individual acculturative change trajectories has the potential to broaden current knowledge about immigrants' adaptation processes in general.

Keywords: acculturation timing, immigrant adolescents, host language adoption, immigrant family interactions

Introduction

There is a growing body of research that aims to understand the acculturation process of immigrant and minority youth and their families. Despite a broad consensus that acculturation is a dynamic, developmental process of change, scholars have noted that the adherence to cross-sectional and between-group study designs remains one of the greatest challenges of acculturation research (T. K. Lee et al., 2020; Schwartz, Szabó, et al., 2020). While longitudinal studies on acculturation are increasing, they still mainly focus on interindividual differences in acculturation levels (sometimes controlling for earlier assessments) or assume acculturative change is a uniform process across all individuals. This lack of research investigating intraindividual acculturative change limits the understanding of within-person dynamics, as well as between-person differences, in the acculturation process (R. M. Lee et al., 2020).

In this study, we empirically tested acculturative pace and relative timing as two recently introduced concepts that measure how acculturation changes over time (Titzmann & Lee, 2018). We specifically investigated acculturative change in host language use (German language) using data from a longitudinal study of ethnic German immigrant adolescents and parent-adolescent dyads who immigrated from the former Soviet Union (also denoted as Union of Soviet Socialist Republics [USSR]) to Germany (Silbereisen et al., 2014). The study also evaluated the relation of acculturative changes in adolescents' host language use with family interactions including child disclosure and family hassles. To examine these dynamic processes, we used a latent True-Change approach, which allows to analyze true intraindividual change and interindividual differences in intraindividual change (Steyer et al., 1997), as a new methodological approach for modeling change in acculturation research.

Intraindividual Changes in Acculturation

Acculturation refers to changes that take place as a result of contact with culturally dissimilar people, groups, and social influences (Redfield et al., 1936). On an individual level, acculturation refers to how individuals change and adapt as a result of longer term, continuous contact with a new culture (Ward & Geeraert, 2016). In this respect, acculturation can refer to the acculturation to a new host culture or, in the case of children of immigrants, enculturation into one's heritage culture (Berry et al., 2006). In other words, acculturation is a dynamic, lifelong process of intraindividual changes when adapting to life in a new cultural context whether in a host culture or an ethnic heritage culture (Oppedal & Toppelberg, 2016):

Scholars recognized the dynamics in acculturative processes and started to investigate acculturative processes using longitudinal data. Nevertheless, most of this research relies on interindividual differences in acculturation levels (sometimes controlled for earlier assessments)

or assumes a uniform process of acculturative change that is similar across individuals. There is, however, evidence that change processes can vary between and within individuals and between domains (Schwartz, Unger, Zamboanga, et al., 2015). Behavioral acculturation changes that facilitate contact with the host society, such as host language acquisition, have been shown to occur earlier and faster in the adaptation process than changes in family values or identification (Bornstein, 2017; Ward & Geeraert, 2016). Moreover, research has revealed that acculturation is not a linear process and that different change rates can exist within individuals and between individuals. The process of host language acquisition is a good example to investigate such (intra)individual acculturative change trajectories. Previous research indicated that host language acquisition can be described as a learning curve with more pronounced increase in host language use during the initial period of migration and less pronounced changes in the later period of migration (e.g., Masgoret & Ward, 2006; Michel et al., 2012). Research on such acculturative change processes on an individual rather than group level as well as on interindividual differences in such intraindividual change patterns and their implications is, however, still small in numbers (R. M. Lee et al., 2020; T. K. Lee et al., 2020). This research gap may be explained by a lack of concepts and approaches to systematically describe and examine the universal and specific dynamics in acculturative change (Bornstein, 2017; Juang & Syed, 2019). Titzmann, Lee, and colleagues (2018; see also R. M. Lee et al., 2020) recently introduced the concepts of acculturative timing, tempo, pace, and synchrony to describe the dynamic, individual process of acculturation over time. Inspired by pubertal development scholarship (e.g., Mendle et al., 2010), they proposed multiple ways in which acculturation, as well as enculturation, unfolds over time in the lives of immigrants and children of immigrants. Specifically, the concepts allow investigating the variations in rate and ways of acculturation within and between individuals.

Acculturation timing refers to the beginning of acculturation processes. It is an index for when a person initiates and experiences cultural and psychological changes related to the contact of at least two cultures. These changes often include behaviors or attitudes towards the host culture, but may also affect heritage culture behaviors and attitudes. Acculturative timing can be operationalized and measured in multiple ways, depending on the way in which timing is defined. *Chronological timing* is traditionally assumed to start on the day when arrive in a new society and can be measured by the age of immigration. *Transition timing* captures the actual starting point of acculturation, because youth and their families may prepare themselves for the transition and may start to acculturate even before they actually move to the new country (e.g., remote acculturation; Ferguson et al., 2017). *Relative timing* addresses one's acculturation level relative to co-ethnic peer acculturation levels and, thus, assesses between-person differences in timing. *Acculturation tempo* describes the duration of the acculturation process. To define acculturation tempo requires

a definition of the start and the end of acculturation processes, such as chronological timing and behavioral competency. *Acculturation pace* refers to the speed at which acculturation occurs in a given dimension or domain. This speed can vary between individuals, groups and dimensions, but also within individuals and groups, and, thus, describes intra- and interindividual differences in acculturative change. As acculturation is a multi-faceted phenomenon, in which cultural practices, values, and identification converge (e.g., Schwartz et al., 2010), it is also important to investigate the coordination of acculturative changes across different domains, which is defined as *acculturation synchrony*. While these acculturation change concepts have been theoretically articulated, there has not been any attempt to measure and empirically test them in immigrant samples.

The purpose of this study was to empirically measure and test acculturative pace and relative timing of host language use among adolescent immigrants and its role for changes in family interactions. Specifically, acculturative pace can add to existing literature by providing insights in how individual change trajectories in the process of host language adoption affect family interactions over time. Including relative timing, we are able to go beyond frequently studied mean-level differences between immigrants by investigating whether deviations in language adoption compared to co-ethnic peers at a given time point in the acculturation process affect family interactions. Combining these two concepts in one study can reveal whether it is rather the speed of adolescents' changes or the actual level of adaptation as compared to others that can affect family life (Titzmann & Lee, 2018).

Host Language Use and Family Interactions

In cross-sectional research, research has repeatedly confirmed that adolescents' language acquisition, particularly compared to their parents, is related to family interactions and can change family relationships (Weisskirch, 2017). Language use in immigrant families is particularly meaningful because it is a well-known predictor of immigrants' adjustment and is assumed to help families best navigate in new contexts (Kim, 2017). The role of dynamics in language adoption for family functioning can be seen, for example, in phenomena such as language brokering or parentification, which both demonstrate how particularly youth process of host language adoption can ease and influence family adaptation (Lee et al., 2000; Weisskirch, 2020). This interplay of language adoption and family interactions can also be understood from the embedded contexts model (Szapocznik & Kurtines, 1993). According to this model, adolescents are embedded in the family, which in turn is embedded within a culturally diverse context. In this regard, the embedded contexts model emphasizes the influence of acculturation-related processes of adolescents on family interactions and adaptation (Zhou et al., 2017). These

findings make a case for why studying the process of adopting the host language is relevant to understanding family relationships and interactions. However, the main-focus of former research targeted how levels of language use and interindividual differences in levels of language use are related to family interactions and longitudinal evidence on how and when dynamics in language use affect family life is still scarce (Wang & Yip, 2020).

In this respect, acculturative pace may substantially contribute to extant research by testing how the speed of intraindividual changes in language use affects family interactions over time. Acculturative pace can differ between and within individuals and can be operationalized by change rates of variables between measuring points. If adolescents change their language rapidly (accelerated acculturative pace), which will likely cause a rapidly growing acculturation gap between the generations, parents may be afraid that this accelerated orientation of adolescents towards the new culture endangers the (heritage-oriented) family traditions to which most parents prefer to adhere (Birman, 2006a; Ho, 2010). Hence, it may not be the level of language use per se that affects family interactions, but the change rate in a given time frame. Fast changes by adolescents may also restrict parents' opportunities to cope with and adjust to the development of their offspring resulting in a distancing or alienation within families (Hwang et al., 2010). If adolescents' language use changes slowly (low acculturative pace), however, all family members have time to adjust to the new circumstances and challenging family interactions or family conflict may be less likely. Hence, differences in acculturation pace may explain why high levels of adolescents' host language use may sometimes compromise family relationships and sometimes not (Telzer, 2010).

Relative timing of host language use can be determined by the deviance of adolescents' state of language use from the expected level of adaptation based on co-ethnic peers of the same immigration cohort (i.e., similar length of residence). The contrast to frequently studied interindividual differences in language use is that this concept takes into account the length of stay when comparing host language use between individuals. Hence, it refers to a deviation from the "normative" (i.e., average) path of change in language use that is determined by co-ethnic immigrants. For example, levels of adolescents' host language use may more likely affect family interactions if adolescents use it more often than co-ethnic peers with comparable length of residence because parents may perceive this behavior as inconsistent with the social norms in the co-ethnic community (Ho, 2010).

Given that acculturation is a dynamic change process (Masgoret & Ward, 2006), the study of the timing concepts requires some additional considerations. Based on findings of varying change rates in acculturation-related processes over time (Jugert & Titzmann, 2017; Michel et al., 2012), the effects of acculturative pace in language use on family interactions may depend on

length of residence. An accelerated pace of changes in language use may particularly compromise family interactions when these changes occur in early stages of the acculturation process because parents are not yet familiar with the host country and less prepared to deal with adolescents' rapid adaptation. This parental overburdening may result in parental rejection of adolescents' host culture orientation, and hence, harm family relationships (Telzer, 2010). Pace of changes in host language use may less affect family interactions in later stages of the acculturation process because the family already had time to adjust to and to learn about the new context and to establish a (new) family system. In sum, according to this line of thinking the examination of interactions between acculturative pace and length of residence seems vital for the understanding of the dynamics in acculturation (Titzmann et al., 2008).

Family functioning and interactions can be assessed by a myriad of indicators. In this study, we studied associations of timing concepts in language use with two central aspects of family life: *family hassles* and *child disclosure*. Family hassles assessed intrafamilial acculturation-related conflicts due to parental objections of adolescents' adaptation to the host culture (Titzmann et al., 2011). In contrast to findings on everyday intrafamilial conflict, research on trajectories of acculturation-related conflicts is fairly rare (Juang et al., 2012). However, some findings propose acculturation-related family hassles in adolescent samples may decrease over time because parents' own acculturation minimizes potential acculturative stressors (Lui, 2015). Further, adolescents spend less time with family and more time with peers as they get older, so that there are fewer opportunities for parent–adolescent conflict (Laursen et al., 1998). Similar to other processes in acculturation research, prior studies on changes in immigrant family hassles over time have predominantly examined mean rates of change. There may be, however, interfamilial variation in intrafamilial change over time. Therefore, this study investigated the prediction of within-person changes in reported family hassles over time by timing of language use.

Child disclosure, the second outcome in this study, is the voluntary sharing of daily life of the offspring with their parents and is often used as proxy to examine trustful parent-child relationships (Stattin & Kerr, 2000). Previous research has shown that intergenerational differences in host adaptation (e.g., host language use) can lead to family alienation, which makes a case for why studying the timing of language is relevant to understanding family relationships via child disclosure (Aumann & Titzmann, 2018). However, since existing research identified substantial parent–adolescent disagreement in child disclosure, particularly in immigrant families, (Mastrotheodoros et al., 2020), this study examined the associations of changes in language use with child disclosure from both adolescent and parental perspectives.

Ethnic German Immigrants in Germany

We empirically tested the timing concepts in a sample of ethnic German immigrants in Germany. This group represents a specific kind of immigration, called repatriation or diaspora migration (i.e., the return of members of an ethnic group into the country of origin after several generations, Tsuda, 2009). Ethnic German immigrants have their ethnic roots in Germany and were incorporated into the former Soviet Union, in the late 18th century where they flourished at first. After World War II, however, the German population was discriminated substantially (e.g., Germans were forbidden to speak German in public, Armbrorst, 2001). Therefore, the fall of the Iron Curtain in 1989 resulted in a large (re-) migration of ethnic Germans to Germany. Nevertheless, the forced assimilation in the former Soviet Union and the enduring contact spanning generations resulted in substantial involvement in the Russian culture. In Germany, ethnic German immigrants, thus, face the same challenges as other immigrant groups such as questions of identity, adaptation to host culture behaviors and discrimination (Titzmann et al., 2011). Ethnic German immigrants comprise the largest immigrant group in Germany and worldwide there are numerous other large and small diasporas, such as the Indian, Finnish or Chinese diaspora, which make up a large proportion of the migrant population (Tsuda, 2009). Studying ethnic German immigrants therefore allowed us to test acculturative pace and relative timing in the largest group of immigrant families in Germany.

Our Study

The purpose of this study was two-fold. First, we sought to operationalize, measure, and test two concepts of acculturative timing – acculturative pace and relative timing. Second, we investigated the role of acculturative pace and relative timing in adolescents' host language use for changes in family hassles and child disclosure. We studied these research questions by simultaneously addressing another limitation of earlier research. Previous studies on family interactions have been criticized for using self-reports by single family members, because research confirmed discrepancies in adolescent-parent perceptions of the familial and adolescent adjustment (De Los Reyes & Ohannessian, 2016). That is, we conducted secondary data analysis on a 3-wave longitudinal data set (T1- T3) in which there is youth-informant data at three time points and additional parental data at the last wave. Hence, we wanted to address this limitation by combining two approaches in this paper: a *Youth Study* with the focus on pace and relative timing of host language use and associations with changes in family hassles reported by adolescents with three measurement points and a *Family Study* comprising parent-adolescent dyads at T3. In this in-depth-study, we examined associations of pace and relative timing of host

language use with individual levels of child disclosure independently reported by parents and adolescents.

Youth Study

Based on previous findings on the interplay of acculturation-related changes and family interactions, we hypothesized that accelerated pace of host language use would be related to changes in family hassles (Hypothesis 1), because an accelerated host orientation of adolescents would increase the parent-adolescent acculturation gap and endanger the (heritage-oriented) family traditions. Further, we hypothesized that an advanced relative timing (higher levels of host language use compared to the peer-group of similar length of residence) would be associated with changes in family hassles (Hypothesis 2) because parents would perceive this behavior as inconsistent with social norms in the co-ethnic community. Finally, we hypothesized that pace of host language use would be more strongly related to family hassles when changes have occurred in early stages of the acculturation process because parents would be less prepared to cope with adolescents' accelerated adaptation (Hypothesis 3).

Family Study

In the in-depth Family Study, we examined associations of pace of host language use with child disclosure reported by parents and adolescents at T3. We hypothesized that accelerated pace of host language use would be related to lower levels of child disclosure at T3. These associations were tested for parental reports (Hypotheses 4a) and were tested for replication with adolescents' reports (Hypothesis 4b). The underlying assumption was that a more rapid orientation of the offspring towards the host culture may lead to more intergenerational alienation and family distancing and, hence, less sharing of information of adolescents with their parents. Consistent with the assumptions of the Youth Study, we hypothesized that higher levels of host language use compared to the peer-group would be associated with lower levels of child disclosure (Hypothesis 5). Finally, we again hypothesized that pace in host language use would be more strongly related to child disclosure when changes occurred in early stages of the acculturation process (Hypothesis 6).

Method

Sample

Data were taken from a large multi-disciplinary and multi-informant longitudinal research project comprising three waves of data collection spanning 3 years, gathered from 2003 to 2006

(see also Titzmann & Silbereisen, 2012). To investigate our hypotheses, we used adolescent data from all three waves (T1-T3; Youth Study) and additional parental data at T3 (Family Study).

Youth Study

The adolescent sample consisted of 378 ethnic German immigrant adolescents from the former Soviet Union. At T1, adolescents' mean age was 15.7 years ($SD = 2.3$), and 62% were girls. Almost 76% of the adolescents participated at all three measurement occasions. All ethnic German immigrant adolescents were born in states of the former Soviet Union and had a mean length of residence in Germany of 7.8 years ($SD = 4.1$) at T1. This adolescent sample was used to test Hypothesis 1 to 3 of the Youth Study.

Family Study

The Family Study is based on a multi-informant approach in which both adolescents and their parents ($n = 378$ dyads) were questioned at T3. The educational level of the adolescents' parents (85% mothers, M_{age} : mother = 44.7 ($SD = 6.5$), fathers = 46.5 ($SD = 6.3$)) was high, with the majority of participating parents holding a degree from a college of higher education or university (50%). Most of the parents were married (80%).

Procedure

Sampling took place in cities in Germany with a population between 100,000 and 200,000 with differing proportions of immigrant inhabitants in several federal states in Germany. Adolescents were recruited from 54 schools and were selected according to length of residence, school type, and age. Informed consent was obtained from all adolescent participants in this study and their parents. They were informed about the process and purpose of the research and their right to refuse participation without consequences at any time before, during, and after data collection. Adolescents first took part in data collection at school (T1). Later, adolescents were contacted by post in 1-year-intervals, after having consented to their data being used in that way (T2-T3). Those who took part in the first assessment were entered in a prize drawing; all participants in later waves received a €10 voucher from a statewide electronic store.

Measures

Adolescents completed self-report questionnaires in school. At follow-up assessments, accomplished at 1-year intervals, questionnaires were sent by mail to addresses provided by the participants. For all waves, the questionnaires included both German and Russian language to enable participants to complete the questionnaire in their preferred language. All measures were

based on established scales, pilot tested, translated, and back translated by experts to ensure same meaning.

Host Language Use

Adolescents' host language use was measured at all three waves by two items comprising social situations of language use ("How often do you speak German with your parents/friends") adapted from a scale by Mendoza (1989). Items were rated on a five-point-Likert scale ranging from "never" to "always" (Pearson correlation T1 to T3: $.51 < r < .57, p < .01$).

Family Hassles

Family hassles were reported by adolescents at all three waves and represented parental objections to their offspring's adaptation to the new culture ("My parents did not want me to orientate too much toward local adolescents."). The three-item scale was developed and validated by Titzmann et al. (2011) and was applied successfully in various contexts and ethnic groups (Titzmann et al., 2014). Adolescents rated how often they had experienced each hassle during the last 12 months using a five-point Likert scale (0 = "never" to 4 = "more than 10 times").

Child Disclosure

Child disclosure was reported by one parental part and adolescents using a scale from Stattin and Kerr (2000). It comprised five items such as "Do you keep a lot of secrets about what you do during your free time? / Does your child keep a lot of secrets from you about what she or he does during free time?". Items were rated on a six-point-Likert scale ranging from "never" to "always" (only at T3: adolescents: $\alpha = .86$, parents: $\alpha = .79$)

Control Variables

These variables were part of the questionnaire. Adolescents reported their gender, date of birth, and their length of residence (LOR). Parents reported their highest educational achievement of each parent and rated their host language fluency with three items on six-point-Likert scale ranging from "very bad" to "very good" (parents only at T3: $\alpha = .81$).

Data Analytic Strategy

We applied the same two-step procedure for the Youth and the Family Study. First, we modeled the acculturative timing concepts: We applied latent True-Change models (Steyer et al., 1997) to assess acculturative pace of host language use and family hassles, and used regression analysis to model relative timing of host language use in Mplus Version 8.4. To examine the moderation of acculturative pace by length of residence (LOR), we used interaction terms of pace of language use with length of residence (LOR x Pace 1; LOR x Pace 2). All variables were

mean-centered prior building interaction coefficients and were also included as mean-centered main effects in the models (Hayes, 2013).

In the second step of our analyses, we investigated associations of timing concepts of host language use with changes in family hassles (Youth Study: Model 1a & 1b) and levels of child disclosure at T3 (Family Study: Model 2a & 2b) by applying structural equation modeling in Mplus. We included control variables (age, gender, LOR, parental fluency in host language), acculturative pace and relative timing of host language use and the interaction terms of length of residence and pace of language use (LOR x Pace 1, LOR x Pace 2) into the models. We decided to use this two-step procedure because including all steps into a single model would result in a very non-parsimonious model. Further, this two-step procedure significantly improved our ratio of sample size in relation to the explained coefficients and improved the stability of our models.

Acculturative Pace

To measure acculturative pace, we used latent True-Change models (Steyer et al., 1997), also known as Latent Change Model (e.g., McArdle & Hamagami, 2001). Latent True-Change models are based on the longitudinal measurement model of confirmatory factor analysis and specify “true intraindividual change” scores between two or more occasions of measurement as the values of an endogenous latent variable in the model. In this approach, change over time is modeled directly in the form of latent difference variables, which represent intraindividual changes on latent (hence measurement error-free) level. This also allows to study interindividual differences in intraindividual change (see for example also McArdle & Hamagami, 2001). For this measurement model, at least strong factorial invariance (equal loadings and equal intercepts of the indicators) over time is required, as this is an important prerequisite for the interpretability of the latent difference variables. Therefore, we tested for strong factorial measurement invariance over time for language use (CFI = .99, RMSEA = .015, 90% CI: [.00, .02]) and family hassles (CFI = .90, RMSEA = .057, 90% CI: [.00, .08]). Model fit was assessed with the root mean square error of approximation (RMSEA) and the comparative fit index (CFI). RMSEA values of .02 or less and .06 or less were considered evidence of good and adequate fit, respectively (Schumacker & Lomax, 2010). CFI values of .99 or greater and .90 or greater were considered evidence of good and adequate fit, respectively (McDonald & Marsh, 1990). Thus, we were able to assume strong factorial invariance for language use and family hassles over time. This allowed us, as required in latent True-Change models, to fix latent path coefficients of latent state factors and latent change factors and residual variances of the latent state factors at the second and third measurement time points. In our analyses, acculturative pace between T1 and T2 was termed Pace 1, and acculturative pace between T2 and T3 was termed Pace 2.

Relative Timing

Relative timing was assessed by adolescents' deviance from the expected level of host language use based on co-ethnic peers of the same immigration cohort (similar length of residence). The expected level of language use was built as regression coefficient by using a regression model of length of residence and language use based on the sample. Based on the individual length of residence of the adolescents, the expected value for language use was derived from the regression model and compared with the observed value. The difference between these values indicated the relative timing.

Results

As a preliminary step, all variables were tested for missing data. Participants with and without missing data were compared on the study variables using Little's (1988) Missing Completely At Random test. Significant results in the Youth and in the Family Study suggested that missing values were not missing completely at random (χ^2 s (34) ≥ 76.78 , $ps < .01$). As is recommended for structural equation modeling, missing values in all constructs were handled by the Full Information Maximum Likelihood algorithm (FIML). FIML has been shown to reveal robust estimations if missing data do not exceed 25%, which was not the case in our study (Collins et al., 2001; Newman, 2014). As compared to listwise deletion, the benefit of the chosen procedure is that it does not lead to the common disadvantages, such as losing statistical power or biased parameter estimation (Graham et al., 2003).

Youth Study: Changes in Host Language Use and Family Hassles

In the first step, to examine our hypotheses, we applied latent True-change models to build pace of changes for language use and family hassles (Table 1). The model regarding host language use fitted the data sufficiently, χ^2 (9, $N = 847$) = 10.62, $p = .30$; CFI = .99, RMSEA = .015. The results confirmed an overall increase in host language use between T1 and T2 (Pace 1; $Z = 6.31$, $p < .001$), but no significant increase in host language use between T2 and T3 (Pace 2; $Z = .65$, $p = .52$). Data also showed interindividual differences in intraindividual change of host language use between T1 and T2 ($Z = 5.87$, $p < .001$) and T2 and T3 ($Z = 4.00$, $p < .001$).

With respect to family hassles, we also estimated latent True-Change models to generate individual change scores. The latent True-Change model regarding family hassles also fitted the data sufficiently, χ^2 (30, $N = 847$) = 145.5, $p < .05$; CFI = .90, RMSEA = .057. While changes between T1 and T2 were not significant (Pace 1; $Z = -1.08$, $p = .28$), changes between T2 and T3 were significant (Pace 2; $Z = -2.35$, $p < .05$) and showed a decrease over time. The analysis also confirmed interindividual differences in intraindividual change of family hassles between T1 and T2 ($Z = 6.01$, $p < .001$) and T2 and T3 ($Z = 4.40$, $p < .001$).

Table 1*Descriptive Statistics and Correlations of Study Variables*

	<i>Mean</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Language Use T1	2.862	1.116	1													
2. Language Use T2	3.055	1.107	.944**	1												
3. Language Use T3	3.074	1.137	.928**	.983**	1											
4. Pace 1 LU (T2-T1)	.193	.372	-.193**	.141**	.140**	1										
5. Pace 2 LU (T3-T2)	.019	.209	.048	.053	.236**	.015	1									
6. Relative Timing LU	.003	.959	.856**	.792**	.774**	-.228**	.017	1								
7. Family Hassles T1	1.391	.510	-.220**	-.218**	-.217**	.010	-.027	-.101**	1							
8. Family Hassles T2	1.354	.537	-.193**	-.207**	-.211**	-.037	-.054	-.070	.733**	1						
9. Family Hassles T3	1.283	.481	-.171**	-.180**	-.179**	-.021	-.023	-.064	.703**	.920**	1					
10. Pace 1 FH (T2-T1)	-.037	.383	.022	.000	-.007	.066	-.040	.036	-.303**	.426**	.354**	1				
11. Pace 2 FH (T3-T2)	-.071	.211	.101**	.117**	.130**	.076	.086*	.032	-.265**	-.451**	-.066	-.279**	1			
12. Child disclosure by adolescents (T3)	4.335	1.094	.002	.042	.046	.120**	.027	-.003	-.040	-.092*	-.083*	-.070	.031	1		
13. Child disclosure by parents (T3)	4.442	1.122	.046	.069	.085	.079*	.094	.108*	-.059	-.040	-.065	.028	-.047	.319**	1	
14. LOR (T1)	7.789	4.133	.519**	.525**	.524**	.002	.065	.002	-.273**	-.247**	-.209**	.013	.158**	.035	-.079*	1

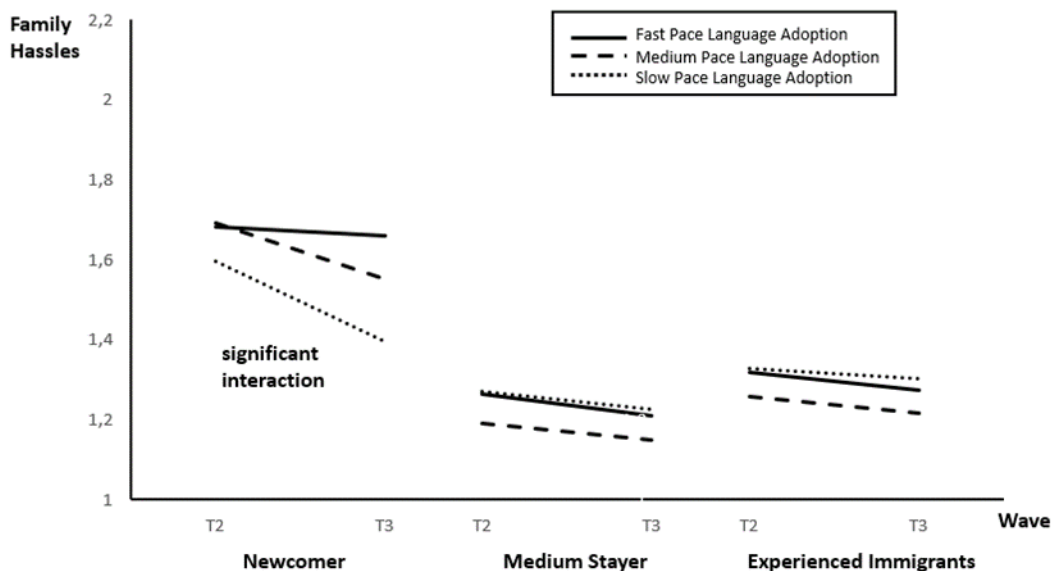
Note. LU = Language Use; FH = Family Hassles; Pace 1 = Changes between T1 & T2; Pace 2 = Changes between T2 & T3; LOR = Length of Residence

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

In the second step, we examined the associations of pace and relative timing of host language use with pace of family hassles (Hypothesis 1-3), using structural equation modeling (Table 2). The dependent variables were Pace 1 of family hassles (Model 1a) and Pace 2 of family hassles (Model 1b). Model 1a was not significant, $\chi^2 (7, N = 378) = 5.1, p = .64$, and we found no significant effect. However, Model 1b was significant, $\chi^2 (9, N = 378) = 35.5, p < .001$. In Model 1b, length of residence ($\beta = .18, p < .01$) and Pace 2 of host language use ($\beta = .15, p < .01$) explained most of the variance, whereas Pace 1 of language use was only marginally significant ($\beta = .09, p = .09$). Relative timing of host language use did not predict changes in family hassles. The interaction of length of residence and Pace 2 of host language use was also significant ($\beta = -.11, p < .01$; Figure 1): Pace 2 of language use was particularly predictive for changes in family hassles in early stages of the acculturation process. These results supported the expectations of Hypothesis 1 that accelerated pace in host language use was associated with changes in family hassles for Pace 2 of language use and family hassles (Model 1b). We found no support for associations of relative timing with changes in family hassles (Hypothesis 2). Lastly, data supported the expectations of Hypotheses 3 that pace of changes of host language use were stronger related to changes in family hassles among newcomer migrants.

Figure 1

Interaction of Length of Residence and Changes in Host Language Use Between T2 and T3 on Changes in Family Hassles Between T2 and T3



Note. Newcomer represent immigrant families with a length of residence up to 3 years, Medium Stayer 3 to 10 years, and Experienced Immigrants more than 10 years

Table 2

Structural Equation Models With Standardized Regression Coefficients of the Youth Study (DV: Pace Family Hassles) and Family Study (DV: Child Disclosure)

	Youth Study		Family Study	
	Pace 1 Family Hassles	Pace 2 Family Hassles	Child disclosure parents	Child disclosure adolescents
	Estimate (SE)	Estimate (SE)	Estimate (SE)	Estimate (SE)
Age	-0.01 (0.01)	0.04 (0.05)	-0.09 (0.03)	-0.05 (0.03)
Female Gender	0.01 (0.02)	0.04 (0.05)	0.15** (0.12)	0.14* (0.13)
LOR	0.01 (0.01)	0.18** (0.05)	-0.12* (0.02)	-0.02 (0.02)
Parental Lang. Fluency	-0.03 (0.02)	0.02 (0.06)	0.16** (0.06)	0.01 (0.06)
Relative Timing Lang.	0.05 (0.03)	0.06 (0.06)	0.03 (0.07)	0.01 (0.07)
Pace 1 Language	-0.01 (0.06)	0.09 (0.06)	0.11* (0.17)	0.11* (0.18)
Pace 2 Language		0.15** (0.05)	0.06 (0.26)	0.03 (0.26)
Pace 1 x LOR	0.01 (0.01)	0.05 (0.05)	-0.11* (0.04)	-0.12* (0.04)
Pace 2 x LOR		-0.11** (0.05)	0.05 (0.06)	-0.05 (0.06)
Chi-Squared (df)	5.1 (7), $p = .64$,	35.5 (9), $p < .001$	31.2 (9), $p < .001$	15.6 (9), $p = .07$
R ²	.02	.10	.10	.08

Note. LOR = Length of Residence

* $p < .05$, ** $p < .01$, *** $p < .001$

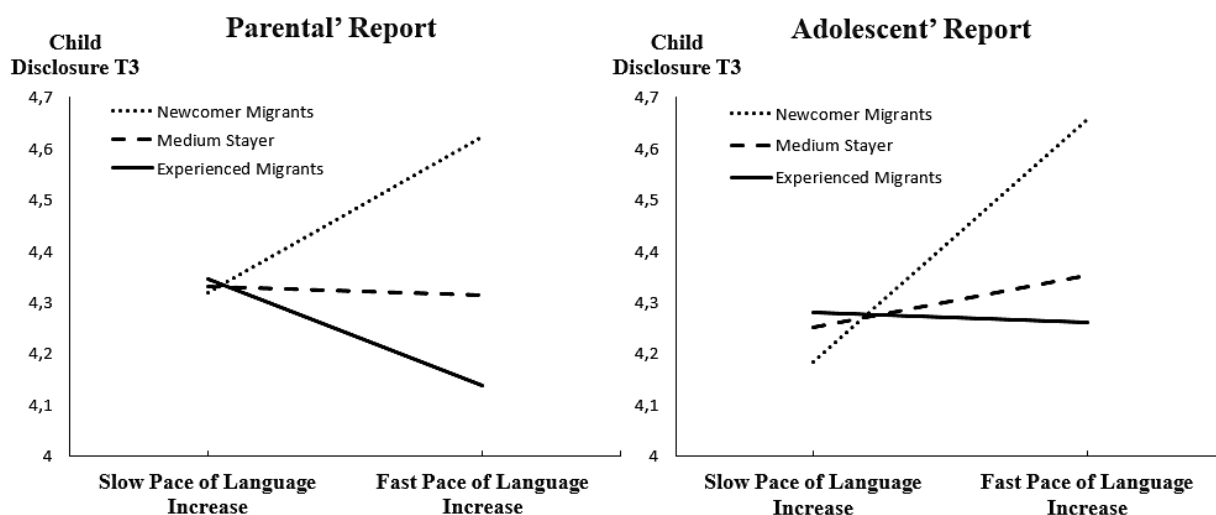
Family Study: Changes in Host Language Use and Child Disclosure

To test the associations of pace and relative timing of host language use with child disclosure in the parent-adolescent dyads (Hypotheses 4-6), we repeated the structural equation models using child disclosure as outcomes reported by parents (Model 2a: $\chi^2 (9, N = 378) = 31.2$, $p < .001$) and adolescents (Model 2b: $\chi^2 (9, N = 378) = 15.6$, $p = .07$; Table 2). In Model 2a (parental report) length of residence was negatively associated ($\beta = -.12$, $p < .05$) and parental fluency in the host language was positively associated ($\beta = .16$, $p < .01$) with child disclosure. In both models, Pace 1 of host language use was positively related to higher levels of child disclosure ($\beta_{\text{parents}} = .11$, $p < .05$; $\beta_{\text{adolescents}} = .11$, $p < .05$). Relative timing of host language use was not related to child disclosure at all. The interaction of length of residence and Pace 1 of host

language use was also significant in both models (Figure 2): Pace 1 of language use was particularly predictive for higher levels of child disclosure in early stages of the acculturation process. Thus, although pace of host language use significantly predicted levels of child disclosure, the results were contrary to expectations of Hypotheses 4a and 4b, because pace was positively related to child disclosure. We found no support for Hypothesis 5, in which we assumed that higher levels of host language use compared to the peer-group (relative timing) were associated with lower levels of child disclosure. Finally, data supported the expectations of Hypotheses 6 that pace of changes of host language use were stronger related to child disclosure when these changes occur in early stages of the acculturation process.

Figure 2

Interaction of Length of Residence and Pace 1 of Host Language Use on Child Disclosure



Note. Newcomer represent immigrant families with a length of residence up to 3 years, Medium Stayer 3 to 10 years, and Experienced Immigrants more than 10 years

Sensitivity Analyses

In this study, we only included adolescents with dyadic data, thus, that also included the parental reports at T3. The complete data set of the project, however, consisted of 847 adolescents in total. The available data allowed to validate the findings of the Youth Study in a much larger sample. Hence, we compared adolescents in the dyad sample with adolescents for which we only had adolescent data (sample with vs. without parental participation) and repeated all analyses of the Youth Study. At mean level, adolescents with and without parental

participation did not differ in demographic variables (age, gender, length of residence, financial situation of the family, neighborhood, highest education of parents), family hassles (T1- T3) and host language use (T1 – T3). The direction of all effects in the structural equation models predicting family hassles were the same and can be found in detail in the supplementary materials. Hence, the exclusion of adolescents without parental participation did not change the results.

Discussion

In this study, we investigated acculturative change of ethnic German immigrant adolescents' host language use and its role for family interactions over time using a 3-wave longitudinal data set with adolescent and parental data. Applying a new conceptual model of acculturative change (Titzmann & Lee, 2018), we examined acculturative pace and relative timing of host language use and its relation with changes in family hassles and child disclosure. Our analyses revealed that acculturative pace (the speed in which adolescents adopted the host language) was the strongest predictor for both changes in family hassles and levels of child disclosure; by contrast, relative timing did not predict either family outcome. Associations between pace of host language use and family interaction were stronger among more recently immigrated adolescents, a finding that was replicated in parental and adolescent reports. The methods and results presented here have the potential to provide advances both in acculturation theory and methodological approaches.

One main aim of this study was to operationalize, measure, and test two concepts of acculturative change – acculturative pace and relative timing (Titzmann & Lee, 2018). As a first step, we tested acculturative pace of host language adoption and family hassles. In this respect, this study contributes to existing research because it explored the interplay of within-person change trajectories of language use and family hassles instead of merely investigating mean rates of change over time. Overall, latent True-Change models revealed an increase in host language use and decrease in family hassles over time, with substantial intra- and interindividual variation. These results empirically fitted to the assumptions of the rare previous studies on intraindividual acculturation-related changes in language use and family hassles over time and illustrated that acculturation-related family conflicts are normatively decreasing with ongoing acculturation (i.e., Michel et al., 2013).

Most importantly, both studies, the Youth and the Family Study, highly supported the significance of acculturative pace for predicting changes in family interactions. In the Youth Study, we found intraindividual decreases in family hassles over time. However, in families with adolescents, who quickly adopted the host language over time (fast pace), family hassles

remained stable over time or only slightly decreased. Hence, a fast pace in language adoption inhibited the often observed decrease in acculturation-related family hassles, whereas in families with adolescents reporting a slower increase in language use (slow pace) family hassles lowered over time. Thus, adolescents' fast adaptation of the host language appears to restrict parents' opportunities to cope with and adjust to the rapid development of their offspring resulting in family conflicts flaring up again (Hwang et al., 2010). However, our study shows that length of residence may be a buffer of this effect because the relation of pace of language use and family hassles was stronger among newcomer migrants. This may be explained by parents own (but commonly slower) acculturation process. With increasing length of residence, parents also acculturate to the new context, which may make the fast development of adolescents less disruptive for family life and interactions.

In the Family Study, contrary to our expectations, a fast increase in host language use was related to higher levels of child disclosure in parental and adolescent data instead of diminishing child disclosure. We based our assumptions on results on well-studied immigrant groups (i.e., immigrants in the US), as ethnic German immigrants experience the same challenges such as language problems, hassles of social integration and perceived discrimination (Titzmann et al., 2011). However, there is a major difference between frequently studied immigrant groups in the US and a diaspora migrant group of ethnic Germans; ethnic German migrants share the cultural and ethnic background with the host society before their arrival. This difference may explain why the majority of ethnic German parents consider themselves as Germans and 77.8% of them report "to live as a German with other Germans" as main immigration motivation (Fuchs et al., 1999). Adolescents, however, do not always share this motivation. Past research suggests ethnic German immigrant adolescents struggle to identify as German (Aumann & Titzmann, 2018). In light of this group-specificity of diaspora immigrants, parents may see adolescents' rapid adaptation to the German culture (fast pace language use) with relief, because it aligns with their motivation to migrate to Germany. The finding that a fast increase in language use was strongly linked to child disclosure among recently migrated families when the migration motivation of parents is probably the highest and still quite salient supports this explanation. Further, adolescents, who adapt at a fast pace to the host society, can support their parents in their wish to rapidly behave or feel like Germans because they can facilitate the integration in the German community for the whole family. The fact that we found the same effects in parental and adolescents' reports further validates our results.

Nevertheless, the findings highlight that acculturation requires group-specific approaches (Bornstein, 2017). Migration conditions and processes of cultural adaptation may differ between diaspora immigrants and other immigrant groups, despite obvious similarities, such as reported

discrimination and integration hassles (Silbereisen et al., 1999). In particular, diaspora immigrants seem to differ from other groups in their migration motivation, which also shows that in acculturation research the motivation to migrate needs to be considered just as much as challenges, hassles or other group characteristics.

Interestingly, length of residence moderated the effects of acculturative pace on family outcomes in the Youth and the Family Study. This moderation effect supports our hypothesis that acculturative changes may be particularly central among newcomer migrants. These findings highlight the need to study acculturation from a developmental perspective (Schwartz, Szabó, et al., 2020; Titzmann & Lee, 2018). That is, changes in family interactions in immigrant families are developmental processes that are to some extent dependent on how long families have lived in the new country (Titzmann et al., 2008). Thus, length of residence can highly affect the adaptation of immigrant families, but, so far, it is often not actively considered in research on acculturation processes (R. M. Lee et al., 2020). Future research should not only target acculturation as a change process, but also should consider the time point of the investigated process. Linking acculturative pace and length of residence as done in our study is an important first step in this regard.

What differs between the Youth and the Family Study is that acculturative pace of language adoption between Wave 1 and 2 was related to child disclosure whereas acculturative pace of language adoption between Wave 2 and 3 was related to family hassles (even if pace of language adoption between Wave 1 and 2 was at least marginally related). Based on our data, we are not able to explain this difference. Our data collections were about one year apart, but explanations for the different effects of acculturative pace would be purely speculative at this time. To explain this effect, longitudinal studies with more data points are needed. Nevertheless, we are confident that this is not a random result pattern because we found the same relations in independent reports (parents/adolescents) and in the sensitivity analyses including the total sample of the data project.

Despite these small inconsistencies, the present findings strongly support the importance to investigate differences and correlates of within-person dynamics as assessed with acculturative pace. In developmental psychology, scholars already successfully applied dynamic timing concepts to explain intra- and interindividual differences in development, which moved forward the understanding of individual developmental processes (Baltes et al., 1988). For instance, puberty research has shown within- and between-person differences in change rates in the development of autonomy that are related to different outcomes of family interactions (i.e., Smetana, 2011). Likewise, our results on acculturative pace are compelling evidence for the dynamic, developmental character of acculturation and its role for interfamilial differences in

family adaptation. Our study is, however, only a first step in this regard, because as more dynamic concepts have been developed their implications on overall adjustment of migrants need to be further tested (Titzmann & Lee, 2018).

Our study also shows that migration research needs a holistic view on acculturation processes. This work is an example how positive and negative implications of acculturation are going hand in hand: while a fast adaptation of adolescents inhibited the prevailing decrease of family hassles over time, it was also related to closer parent-child relationships. This also raises an important question for further research: Can acculturation-related family conflict also be adaptive? Although most studies (including ours) have consistently expected that differences in family acculturation processes are related to negative family interactions, a few studies have found otherwise (see for example Telzer, 2010). In some immigrant families, acculturation-related family conflicts enriched family relationships by improving communication and promoting the intrafamilial understanding (Stuart et al., 2010). Our data do not allow investigating whether family hassles were related to more child disclosure over time or vice versa, because we do not have longitudinal data on all these concepts, but this may be an important next research step that may shed a new light on research on acculturative family phenomena such as acculturation gaps. More generally, research may profit from a closer examination of the interplay of positive and negative developmental processes – or what is thought of as positive and negative.

Relative timing of host language use, in contrast, did not substantially explain differences in family interactions. Reasons for that may be manifold. One explanation may be that family processes are rather independent from comparisons with peers as examined in relative timing. Relative timing may more strongly affect peer-related outcomes in which the relative acculturative state is directly evident. Recent findings support this assumption, as one study revealed associations between relative timing in ethnic identification and friendship homophily (Benbow et al., 2020). In terms of family life, comparisons with peers may only be meaningful if the differences between the children and their co-ethnic peers are directly visible to the parents and linked to personal relevance or status, as in communities with high ethnic identity. This could be the case, for example, for Chinese immigrants in Chinatown in the US or Russian Jews in Israel, who live in very segregated communities with high ethnic and cultural identity (Tsuda, 2009). This is not the case for ethnic Germans in Germany, who live very scattered in a very heterogeneous society.

In terms of methodological contributions, one primary strength of this study includes the operationalization of acculturative pace by latent True-Change modeling and relative timing by deviances from the expected level of language use. Such methods will become increasingly

relevant in acculturation research, especially if the dynamics in these processes are taken into consideration. These approaches may help to inform future research on acculturation in several ways. First, latent True-Change models allow studying longitudinal, intraindividual acculturative change among a range of populations (including various age groups, as well as second-generation immigrants who were born in the country of settlement). Second, in latent True-Change models change over time is not modeled indirectly via residuals, but directly in the form of so-called latent difference variables, and hence, assess change processes on a latent, measurement error-free level. Third, our measurement approaches can be applied to every acculturation-related variable, including identification, customs, behaviors and, values. Fourth, relative timing may advance acculturation research because it takes into account adolescents' deviance from the predicted level of adaptation based on co-ethnic peers of the same immigration cohort instead of only considering the level of adaptation and its correlates. Applying these methodological approaches in further studies may help us to gain a deeper understanding of the ways in which acculturation might differ between and among members of the same family system over time, as well as of the ways in which acculturative change may impact adolescent and family adaptation and successful development. One example for the benefit of such methods may be to understand mixed results on acculturation gaps and their (oftentimes) negative effects for family life (Telzer, 2010). Intergenerational differences, although most frequently used in acculturation research, may not be the main source of changes in family dynamics but rather the speed at which adolescents acculturate (Titzmann & Lee, 2018). Our study provides empirical evidence for this assumption and highlights that the timing in the migration process may impact the interplay of adaptation and family interaction.

Besides the use of recent dynamic concepts of acculturative change, our study has several other strengths, such as the inclusion of adolescent and parental reports, and the combining of different concepts of acculturation timing. Further, our study provides longitudinal evidence for within- and between-person differences in host language use and its substantial impact on family life, which is often called for in present research (Wang & Yip, 2020). However, the results of this study should be interpreted in light of at least three important limitations. First, we only had parental data at Wave 3 and are not able to examine to what extent levels of parental evaluation and perception of adolescents' host language use have changed over time. Second, the majority of our sample participated in this study after 4 to 12 years after their arrival in Germany. As host language acquisition is one of the earliest domains in which adaptive processes can be observed (Masgoret & Ward, 2006) it may be important to replicate the present findings in earlier periods after migration to determine whether the predictive associations among acculturative pace on family interactions are the same. Perhaps pace and relative timing may have a different impact on

family dynamics at the beginning of the migration process, or at a later stage. Third, our findings are limited to ethnic German immigrants in Germany, who are often characterized by a stronger orientation to the host society than unusually studied immigrant groups, because they share the cultural and ethnic roots with the host society (Silbereisen et al., 2014). Some of our results can only be understood with regard to this sample, which limits the generalizability of our findings. Particularly in terms of child disclosure, replications with our immigrant groups in other contexts may change the results.

In conclusion, despite these limitations, the present analyses have investigated a new set of theoretical and analytic models to study acculturative change by empirically validating concepts of acculturative timing introduced by Titzmann and Lee (2018). Our study is among the first to examine two of these concepts (pace, relative timing), which have been shown to have the potential to advance the understanding of the individual acculturation process over time as well as its correlates. Furthermore, our study has successfully applied analytical approaches to examine these timing concepts of intraindividual longitudinal acculturative change, which may extend the methodological toolbox of researchers studying acculturation and related phenomena. In sum, this study is strong proof of the dynamic character of acculturation and an example how intraindividual acculturation processes should be investigated and understood in the future. We are convinced that using the presented timing concepts and methodological approaches can lead to more innovative work examining processes related to the immigration among diverse immigrant groups throughout the world.

Supplementary Materials

To validate the findings, we repeated the analyses of associations between language use with changes in family hassles including adolescents with and without parental data ($n = 847$). We did not use this whole sample of adolescents because we aimed at performing the analyses of the Youth and Family study with the same sample of adolescents in order to ensure the interpretability and comparability of the results. The summary of the structural equation models including this larger sample of the data set can be found in Table 3. In accordance with the presented results (adolescents with parental data) Model 1b predicting Pace 2 of family hassles fitted the data ($\chi^2 (8, N = 847) = 29.3, p < .001$). The direction of the effects of Pace 2 and length of residence on Pace 2 of family hassles were the same, but the interaction of both was not significant. However, adolescents with and without parental data did not differ in demographic variables, host language use or family hassles.

Table 3

Structural Equation Model With Standardized Regression Coefficients for Pace 1 and Pace 2 of Family Hassles Reported by Adolescents With and Without Parental Data

	Pace 1 Family Hassles	Pace 2 Family Hassles
	Estimate (SE)	Estimate (SE)
Age	-0.03 (0.01)	-0.01 (0.01)
Female Gender	0.01 (0.03)	0.04 (0.02)
LOR	-0.01 (0.01)	0.16** (0.01)
Relative Timing Lang.	0.01 (0.02)	0.05 (0.01)
Pace 1 Language	-0.09 (0.09)	0.06 (0.02)
Pace 2 Language		0.12* (0.04)
Pace 1 x LOR	0.02 (0.01)	0.02 (0.01)
Pace 2 x LOR		-0.05 (0.01)
Chi-Squared (df)	4.7 (6), $p = .58$	29.3 (8) $p < .001$
R ²	.01	.05

Note. * $p < .05$, ** $p < .01$ *** $p < .001$

4 Study 3: Adolescents' Technical and Culture Brokering in Immigrant and Native Families

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Note. Formatting has been adjusted, content is verbatim and has not been edited.

Aumann, L., & Titzmann, P. F. (2020). Adolescents' Technical and Culture Brokering in Immigrant and Native Families. *Manuscript submitted for publication, in Revision.*

Abstract

Adolescents' adopting responsibilities within immigrant families is a well-studied phenomenon, but adolescents' facilitating the parental use of new technologies (technical brokering, Katz, 2010) is less understood with regard to migration-specific processes. In immigrant families, adolescents' technical brokering may help families in adapting to the host culture and in keeping contact with friends and family abroad. This study investigated differences in the level of technical brokering between German immigrant and native Swiss adolescents and tested whether migration-unrelated (family life) or migration-related (i.e., culture brokering, Tse, 1995) factors are better predictors of interindividual differences in technical brokering. The sample comprised 301 adolescents in Switzerland (136 German immigrant adolescents (mean age = 15.3, 65% female); 165 native Swiss adolescents (mean age = 15.9, 61% female)). Adolescents reported the frequency of technical brokering tasks as well as culture brokering and migration-related processes. The results revealed that German immigrant adolescents reported providing technical brokering more frequently than native Swiss adolescents. Hierarchical regressions confirmed that technical brokering in German immigrant families is best explained by adolescents' supporting their family in mastering the transition to a new country, as predictors pertaining to culture brokering, and host culture orientation explained most of the variance. This interpretation received further support by an interaction effect showing that technical brokering is particularly frequent when adolescents act as a culture broker in families with substantial sociocultural adaptation difficulties. The study complements an often deficit-oriented view on immigrant youth with a view of their active and constructive role in families.

Keywords: brokering, family support, immigrant adolescents, comparative, ICT

Highlights:

- This comparative immigrant/non-immigrant study investigated adolescents' supporting their parents in technical matters (technical brokering).
- Adolescents in both ethnic groups reported technical brokering showing the normativity of such behavior in the technological age.
- Immigrant adolescents reported a higher frequency than their non-immigrant peers revealing a migration-specific task load.
- In the immigrant sample, technical brokering seems associated with adolescents' supporting their family in mastering the transition to a new country.
- This study views the active and constructive role of (immigrant) adolescents in families and societies.

Introduction

Understanding family dynamics is increasingly gaining attention in research on the acculturation process of immigrant families. In particular, the phenomenon that immigrant adolescents (have to) support their families in various domains (e.g., translating documents, assisting parents with authorities) is growing in awareness because it seems to be associated with immigrant adolescents' psychosocial functioning and families' sociocultural adaptation (Weisskirch, 2020). However, whereas this migration-related adolescent support, also known as culture brokering (Tse, 1995), is increasingly studied, immigrant adolescents' support for their parents in technical tasks (i.e., technical brokering) is less targeted in immigrant families (Fawcett, 2018). Technical brokering is defined as adolescents' support for their parents in the use of information and communication technologies (ICT) (Katz, 2010). Although this concept originally was not developed to study immigrant families' adaptation, it has moved into the focus of immigration research because ICT has been assumed to support acculturative processes (Guan, 2017). It is still uncertain, however, whether technical brokering differs between immigrant and non-immigrant families and how technical brokering is associated with other forms of adolescents' family support. To shed some light on these questions, we investigated (a) whether immigrant and native adolescents differ in technical brokering, (b) which migration-related or general, developmental processes reinforce technical brokering in immigrant families, and (c) under which conditions culture brokering is a particularly strong predictor of technical brokering. In this study, we applied these research questions to German immigrant and native Swiss adolescents in Switzerland and investigated whether technical brokering in immigrant families can be better explained by general predictors referring to the family life or by migration-specific factors, such as culture brokering.

Adolescents' Support for Their Parents

Previous research has shown that immigrant adolescents support their parents and other family members in daily life more than native adolescents (Titzmann, 2012). One domain of support concerns culture brokering, i.e., adolescents supporting their parents in host culture communication, behavior, and/or norms (Tse, 1995; Weisskirch, 2020). Culture brokering is commonly explained as children and adolescents adjusting at a faster pace to a new society and often outperforming their parents in sociocultural skills related to the new cultural context—so-called acculturation gaps (Cheung et al., 2011; Telzer, 2010). Culture brokering has also been shown to generalize to other (migration-unrelated) forms of support, such as instrumental (family decision-making) and emotional (family well-being) family support (Aumann & Titzmann, 2020; Jurkovic, 1997; Kam & Lazarevic, 2014a). The role of adolescents' technical brokering in

immigrant families, however, has received less attention (Fawcett, 2018). Although research has already identified different functions of ICT in the adaptation process of immigrant youth and their families (i.e., Guan, 2017), less is known about which migration-related or general, developmental processes can reinforce technical brokering in these families.

The limited research on technical brokering in immigrant families is surprising given the increase in ICT use among both immigrant and non-immigrant children and adolescents in recent years (Livingstone & Haddon, 2009; Van den Bulck et al., 2016) and the usefulness of ICT in the migration process (Guan, 2017). Reflecting this technological change among adolescents, the number of internet users in German-speaking areas rose from 37% to 86% of the population aged over 14 from 2001 to 2019 and over 90% of youths in Western Europe reported owning a smartphone in 2018 (Statista, 2020), a trend that still continues. Not surprisingly, ICT competence is now even regarded as a new developmental task for the adolescent years (Hurrelmann & Quenzel, 2018). Research also confirmed intergenerational differences in ICT use within families (Livingstone & Haddon, 2009; Van den Bulck et al., 2016). The younger generation has been shown to be particularly active ICT users and the quickest to learn ICT skills, in particular compared to their parents (JIM, 2018; Kam & Lazarevic, 2014a; Moser, 2009). As a result of this intergenerational discrepancy in ICT knowledge, adolescents can become the most important family resource when it comes to technical support independent of immigrant background (Correa et al., 2015; Yip et al., 2016).

In immigrant families, technical brokering is of particular interest because technical brokering may play a prominent role in acculturation processes. Acculturation refers to individual processes of change in customs, activities, identification, and values following intercultural contact (Redfield et al., 1936) This intercultural contact can include more than two groups and cultures (Morris et al., 2015), and can take place without direct contact (remote acculturation; Ferguson et al., 2017). Furthermore, acculturation is a highly dynamic, developmental process in which immigrants can simultaneously adopt and/or retain behaviors, values, and norms of multiple cultures (Titzmann & Lee, 2018; Ward & Geeraert, 2016). In this adaptation process, ICT can adopt different functions for immigrant families (Guan, 2017; Moser, 2009). On the one hand, ICT are assumed to be the primary medium for communication between immigrants and their extended family and friends abroad. On the other hand, ICT can be a source for individualized information about the host society and may enable immigrants' connecting to the new environment. Furthermore, ICT has been shown to be a useful tool from which to learn and adapt to the language and values of the host society, which facilitates immigrant families' integration in new communities (Elias, 2013; Guan, 2017; Katz, 2011). From this perspective, technical brokering may be particularly salient among immigrant families and associated with

culture brokering. The double role of technical brokering in immigrant families' lives (general family phenomenon and migration-specific support) has resulted in the scientific challenge to disentangle to what extent technical brokering is a universal family dynamic in the current electronic communication era, and to what extent migration-related processes promote this support (Fawcett, 2018; Guan, 2017). To shed some light on this research gap, we investigated migration-specific and migration-unrelated aspects of technical brokering in German immigrant families in Switzerland in comparison to native Swiss families.

German Immigrant Families in Switzerland

German immigrants in Switzerland represent immigrant families with disproportionately high and accredited parental qualifications and a high socioeconomic status (SES). In 2011, 71% of the German immigrant population in Switzerland reported being highly educated (university entrance qualification or higher) with over 50% working as executives or in high academic positions (Eurostat, 2017). Moreover, most of them (more than 70%) migrated for economic reasons. Switzerland offers a high number of high quality and well-paid jobs that allow even those highly qualified immigrants to further improve their standard of living (Engler et al., 2015). As a result, German immigrants usually experience a rise in socioeconomic status rather than a decline through their immigration to Switzerland. However, even though Germany and Switzerland are characterized by comparable cultural (e.g., individualistic) values (Hofstede, 2001), German immigrants in Switzerland report typical immigration-related phenomena. Families report language problems because Swiss-German, the dialect that is spoken by about 90% of Swiss in German-speaking Switzerland, is hardly understandable to most native Germans. It has differences in pronunciation, vocabulary (e.g., different designation of weekdays), and grammar from standard German spoken in Germany (Helbling, 2011; Schüpbach, 2014). Furthermore, German immigrants perceive hassles of social integration and perceived discrimination. Immigration-related social hassles are reported to emerge from a perceived cultural and economic threat brought in by highly educated and highly qualified immigrants (Freitag & Rapp, 2013). Cultural threat emerges from different cultural practices (e.g., forms of greeting and interpersonal interaction) and the traditional approach of Swiss immigration policies aimed at protecting "Swiss culture" against foreign influences (Manatschal, 2012). Economic threat is reported among well-educated Swiss in high positions or Swiss who seek to improve their job positions because they see their opportunities reduced, particularly by immigrating Germans (Helbling, 2011). These hassles are more pronounced among working adults, leading adolescents to adopt roles as culture brokers and support their parents in social integration (Aumann & Titzmann, 2020).

The study of German immigrants in Switzerland is an ideal context for research on the link between culture brokering and technical brokering. First, due to the high SES, the vast majority of German immigrant families studied has access to new technologies, which is a prerequisite of the examination of adolescents' technical-related responsibilities in their family. In addition, the high SES and education among German immigrant parents allows us to study immigration-related processes without the typical confound between migration and low socioeconomic standing (Wang & Miller, 2020). The Swiss context is also particularly well-suited for a study on technical brokering because Switzerland is highly innovative with widespread implementation and use of new ICT (Global Innovation Index, 2020).

Technical Brokering in Immigrant Families: A Generational or Migration-related Phenomenon

The reported research on technical brokering showed that this phenomenon can be seen from a developmental (competence gaps between generations) and an acculturative perspective (technical brokering supporting acculturative adjustment). Researchers have acknowledged the need for more empirical studies to disentangle migration-specific or migration-unrelated aspects of technical brokering in immigrant families (Fawcett, 2018; Guan, 2017). The current study addressed this question in two ways. Firstly, if technical brokering is (at least partly) migration-specific, comparisons of native and immigrant adolescents should show higher levels of technical brokering among immigrant adolescents. Secondly, if technical brokering is rather migration-specific, migration-related predictors should explain variance in technical brokering in addition to general predictors of adolescents' family support.

Several factors suggest that technical brokering should occur more frequently among immigrant than native adolescents. Immigrant adolescents and their families often strive for keeping in touch with family and friends in their country of origin, and ICT enables this connection to the immigrants' own family and friends. In this regard, as family computer experts, German immigrant adolescents can maintain contact with those who are left behind and support the chatting and internet visits for family members and peers left behind (Kam & Lazarevic, 2014a). ICT also enable access to products from the country of origin through online-shopping and provides information about the heritage and receiving country—a key to connecting with the local society as well as the homeland (Moser, 2009). In addition, previous research on immigrant adolescents has also shown that youth can contribute to their families' adaptation by connecting their family to the host community (Fawcett, 2018; Katz, 2011). As one example, adolescents can write emails for parents in the local dialect to ease the communication with members of the host society (Schüpbach, 2014). These arguments endorse the particular meaning of ICT in immigrant

families, and underscore how adolescents can support their families in the adaptation process by providing technical brokering. Thus, against the backdrop of evidence for intergenerational competence gaps in families in ICT use (Correa et al., 2015), these findings suggest higher levels of technical brokering among German immigrant as compared to native Swiss adolescents.

Group comparisons are not the only way to disentangle migration-specific and general aspects of technical brokering. Combining general and migration-specific predictors is another approach (Titzmann & Lee, 2018). Concerning general migration-unrelated predictors, adolescents' gender may explain interindividual differences in technical brokering. Males tend to report higher competence in using ICT, more frequent use, and higher support for other family members than females. As one result, sons are oftentimes responsible for ICT in the family (Correa, 2010; JIM, 2018). This gender distribution is compelling as it contrasts with findings on traditional household tasks and culture brokering, where females provide higher levels of brokering (Weisskirch, 2005). Besides gender, parental involvement in other responsibilities may be related to technical brokering, in particular in the high SES group studied. German immigrants are known to mainly migrate for occupational reasons to Switzerland and to hold high status occupational positions, which are strongly related to high job engagement (Helbling, 2011). Research has shown that parental job engagement is positively linked to the amount of responsibilities adolescents adopt in their families (Greenhaus & Beutell, 1985). Hence, including parental education and job status (as proxy for parental job engagement; Greenhaus & Beutell, 1985) allows us to investigate general time constraints of parents in the prediction of technical brokering. In addition, we included adolescents' age, whether they live with one or two parents, and siblings as well-known predictors of adolescents' role in family support.

Regarding migration-specific variables, cultural orientation, in particular, may affect technical brokering. Both ethnic as well as host orientation may foster technical brokering. On the one hand, ICT has been shown to ease the transition into new environments for the whole family (Guan, 2017). A host orientation may therefore be associated with more technical brokering. On the other hand, an ethnic orientation may also instigate more technical brokering because a strong ethnic orientation can hinder adaptation to the Swiss context. Hence, immigrants may seek more contact with family and friends abroad (Birman & Trickett, 2001). With regard to acculturative variables, we also included length of residence in Switzerland, Swiss language use, and Swiss language difficulties. Furthermore, culture brokering, a known predictor of general family support, may be related to technical brokering with adolescents providing high levels of culture brokering also providing high levels of technical brokering (Aumann & Titzmann, 2020; Weisskirch, 2020). However, the association between culture brokering and technical brokering may not be similar in strength between families. We expected culture brokering to be more

strongly related to technical brokering when families report higher levels of socio-cultural adaptation difficulties—a family situation in which brokering has a particular salience for adolescents and their families that may exacerbate technical brokering. Research on brokering in LatinX families has shown, for instance, an increased intrafamilial support by adolescents when they are aware of the need of their support and the role they assume in the family with brokering becoming a normative behavior (Fuligni & Telzer, 2012). We, therefore, expected the association between culture brokering and technical brokering to be moderated by families' sociocultural difficulties.

Based on these considerations, we expected to find substantial levels of technical brokering in both samples. We assumed, however, that German immigrant adolescents would report providing technical brokering more frequently than native Swiss adolescents (H1) because of the salience of ICT for immigrant families. To examine whether general migration-unrelated or migration-related predictors better explain interindividual differences in technical brokering, we focused on the German immigrant group to be able to include both groups of predictors in the analysis. Older adolescents, adolescents with single-parents, adolescents with fewer siblings, and adolescents of parents in high occupational positions should report higher levels of technical brokering (H2a). Independently, those adolescents who immigrated recently reported difficulties in adaptation, had a stronger orientation towards their ethnic culture, had a stronger orientation to the host culture, and reported higher levels of culture brokering are expected to report higher levels of technical brokering (H2b). Finally, we assumed that the association between culture brokering and technical brokering would be stronger when adolescents report more adaptation difficulties (H3).

Method

Sample

Data collection in Switzerland took place in nine schools in the Canton of Zurich, supported by the education authority of the canton. The data originated from the project “Adolescent Immigrants from Germany in Switzerland: Challenged or Fostered?” funded by the Foundation Suzanne and Hans Biäsch. The nine schools were spread across different districts of Zurich. All German immigrant youth of these schools were invited to participate. Participation in the study was voluntary. All participants were told that they were free to withdraw their consent to participate at any time without negative consequences. Inclusion criteria for participation were the following: adolescents aged between 12 and 18 years, and, for German immigrants in Switzerland, adolescents who emigrated from Germany to Switzerland or whose parents emigrated from Germany to Switzerland before the adolescents' birth. Native Swiss who

described themselves as foreigners were excluded. Based on these criteria, 23 adolescents were eliminated before the analyses. The final sample comprised 301 adolescents: 165 native Swiss adolescents ($M_{\text{age}} = 15.9$ years ($SD = 1.5$), 60.6% female) and 136 German immigrant adolescents ($M_{\text{age}} = 15.3$ years ($SD = 1.8$), 64.7% female, $M_{\text{length of residence}} = 10.2$ ($SD = 5.0$)).

Measures

Participants completed well-established, standardized questionnaires including validated measures with an online tool in the computer labs of each school or in paper-pencil format when schools did not have sufficient computers available. We verified measurement equivalence across three age groups—early (12-14 years), middle (15-16 years), and late (17-18 years) adolescence—to ensure that adolescents understood the items the same regardless of their stage of development. Analyses across the three age groups by using exploratory factor analyses and Tucker's congruence coefficient (van de Vijver & Poortinga, 2002) showed a very good fit for all scales ($\phi \geq .99$). Tests also showed measurement equivalence across the two groups studied (native Swiss vs. German immigrant; $\phi = .99$).

Demographic Variables

Adolescents reported their age, gender, whether they lived in a single-parent household (due to divorce or widowhood), number of siblings, parental education, and parental occupational status by answering six straight-forward questions. To measure parental education, adolescents indicated the highest level of maternal and paternal completed education on an internationally comparable scale (International Standard Classification of Education [ISCED]) ranging from 0 (*No school level qualification*) to 5 (*Doctoral degree*). The German immigrants were additionally asked when they migrated to Switzerland.

Technical Brokering

Technical brokering was measured with seven items on a four-point Likert scale (ranging from “*never*” to “*almost daily*”) derived from Mesch (2012). Items were introduced as follows: “There are tasks that adolescents can assume in the family. Please estimate how often you have done the following chores in the last month,” and referred to seven tasks related to ICT, such as, “How often have you helped your parents to buy online in the last month?” These items were not migration- or culture-specific, so that they were able to be investigated among native and immigrant adolescents. The alpha consistency of this scale was high with $\alpha = 0.86$ among German immigrants and native Swiss.

Culture Brokering

Culture brokering was measured with six items (adapted scale of Trickett and Jones (2007)), such as, “How often did you schedule appointments for your parents because you know the language or the Swiss culture better?” Adolescents responded using a six-point Likert scale ranging from “*never*” to “*very often*”. The alpha consistency of this scale was high among German immigrants ($\alpha = 0.86$), and this scale has already shown predictive validity in other studies (Aumann & Titzmann, 2020).

Swiss Language Use

Swiss language use was assessed with six items on a five-point Likert scale ranging from “*never*” to “*always*” (Birman & Trickett, 2001), e.g., “How often do you speak Swiss German with your friends?” The alpha consistency of this scale was high among German immigrants ($\alpha = 0.82$).

Swiss Language Difficulties

Adolescents’ Swiss language difficulties were measured with five items, using a five-point Likert scale ranging from “*never*” to “*more than ten times*” (Titzmann et al., 2011), such as “I had problems at school because my Swiss German was not good enough.” The alpha consistency of this scale was high among German immigrants ($\alpha = 0.76$).

Host and Ethnic Culture Orientation

Adolescents’ host and ethnic culture orientation both consisted of three items and included items such as, “I prefer to spend time with Germans/native Swiss” (Ryder et al., 2000). Adolescents responded using a six-point Likert scale ranging from, “does not apply” to “apply.” The alpha consistency of this scale was high among German immigrants (host: $\alpha = 0.74$; ethnic: $\alpha = 0.75$).

Socio-Cultural Adaptation Difficulties

Families’ socio-cultural adaptation difficulties were assessed with eleven items on a five-point Likert scale (ranging from “no difficulties” to “extreme difficulties;” Ward & Kennedy, 1999), such as, “How many difficulties have you experienced making friends in Switzerland?” The alpha consistency of this scale was high among German immigrants ($\alpha = 0.77$).

Data Analytic Strategy

To investigate technical brokering, we compared the seven tasks separately as well as in combination (the overall technical brokering score). The overall technical brokering score consisted of an index, which was a sum score of the number of technical brokering tasks reported

by adolescents (0 = *task never occurred*, 1 = *task occurred at least once in the last month*). We used this sum score because we were interested in the variety of tasks and not in a measure where performing one task frequently can compensate for not performing other tasks (which would be represented by a mean score). All analyses were conducted in SPSS Version 26. To examine group differences in technical brokering (Hypothesis 1), we conducted a multivariate ANOVA. To test Hypotheses 2 and 3, we used hierarchical regression analysis.

Table 1

Pairwise Comparisons of Technical Brokering Tasks Between Ethnic Groups

	Please estimate how often you have done the following chores in the last month.	Ethnic group	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1	<i>Using the Internet on behalf of my family</i>	Native Swiss	2.12	0.668	6.04	.015
		German immigrants	2.36	0.971		
2	<i>Help my family buy online</i>	Native Swiss	1.35	0.577	128.90	<.001
		German immigrants	2.67	1.311		
3	<i>Advice/inform my family about products/goods via Internet</i>	Native Swiss	1.45	0.704	279.40	<.001
		German immigrants	2.90	0.778		
4	<i>Explaining the Internet to my family (e.g., Skype, Facebook)</i>	Native Swiss	1.66	0.677	0.59	.441
		German immigrants	1.60	0.847		
5	<i>Writing/reading/answering emails for my parents</i>	Native Swiss	1.25	0.596	112.41	<.001
		German immigrants	2.14	0.836		
6	<i>Teaching my family how to download music</i>	Native Swiss	1.34	0.584	6.51	.011
		German immigrants	1.54	0.759		
7	<i>Using the Internet for someone else</i>	Native Swiss	1.62	0.732	33.79	<.001
		German immigrants	1.19	0.479		
	<i>Sum score (number of tasks performed)</i>	Native Swiss	3.28	2.05	19.51	<.001
		German immigrants	4.19	1.36		

Results

To test the first hypothesis, we compared technical brokering in seven tasks between native Swiss and German immigrant adolescents. Table 1 presents the results separated for each task. German immigrants reported supporting their parents more frequently than native Swiss adolescents in five out of seven tasks (using internet for family, buying online, advising about products, writing emails, downloading music). The task “using internet for someone else” was reported more frequently by native Swiss adolescents, whereas no significant differences between both groups were found for “explaining internet”. In the sum score, German immigrants reported supporting their parents in more domains related to ICT than native Swiss adolescents ($F(1, 300) = 19.51, p < .001$). Hence, Hypothesis 1 was supported.

Additional descriptive analyses revealed gender differences. Regarding the sum score, results revealed a gender effect in the native Swiss group, with males reporting higher levels of technical brokering than females (males = 3.74, females = 2.99; $F(1, 164) = 5.39, p < .05$), but no gender differences were observed in the German immigrant group (males = 4.44, females = 4.06; $F(1, 135) = 2.47, p = .12$). With regard to single items, we found only three differences. In the native Swiss group, males reported more “advising about products” (males = 1.68, females = 1.31; $F(1, 164) = 10.44, p < .01$) and more downloading music (males = 1.60, females = 1.18; $F(1, 164) = 20.94, p < .001$) than females. In the German immigrant group, males reported more technical brokering in “downloading music” (males = 1.81, females = 1.39; $F(1, 135) = 10.47, p < .01$).

To test Hypotheses 2 and 3, we used hierarchical regression analysis. These hypotheses stated that demographic and acculturative variables predict technical brokering (H2a & b), and that culture brokering is more strongly related to technical brokering when adolescents report socio-cultural adaptation difficulties (H3). Again, we were interested in interindividual differences in the number of tasks that adolescents adopt. Hence, we used the sum score of reported tasks as outcome for multivariate regressions. As acculturation-related variables were only assessed in the immigrant group, these analyses were restricted to the German immigrant sample. The results in Table 2 show that with regard to demographic variables only living in a single-parent family was marginally significant ($\beta = 0.16, p = .059$) in the prediction of technical brokering. When including acculturative variables, the increase in the explained variance reached significance ($\Delta R^2 = .15, \Delta F = 3.80, p < .01$). The analysis showed that culture brokering ($\beta = 0.36, p < .001$) explained most of the variance, which supported the generalization assumption of culture to technical brokering. In addition, ethnic ($\beta = -0.27, p < .05$) orientation was negatively related to technical brokering. The predictor host culture orientation was marginally significant ($\beta = 0.23, p = .057$). Thus, Hypothesis 2a was only supported for single-parent families, whereas

Hypothesis 2b was supported with respect to culture brokering and host culture orientation. The interaction of culture brokering and adaptation difficulties also reached significance ($\beta = 0.18, p < .05$); high levels of culture brokering were strongly related to high levels of technical brokering when adolescents reported high adaptation difficulties (Figure 1). Thus, Hypothesis 3 was supported.

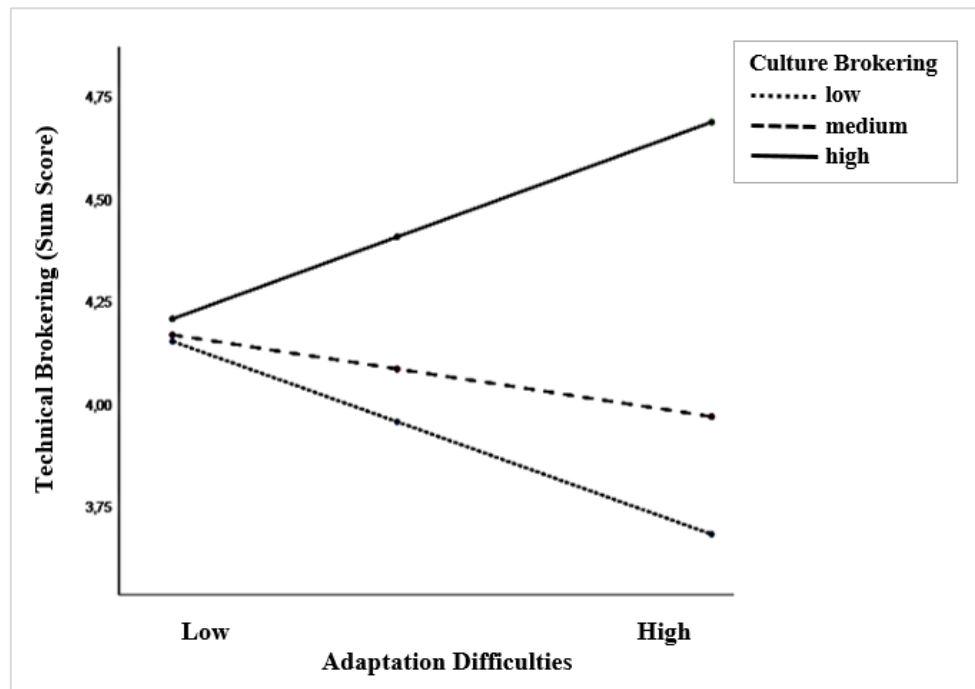
Table 2

Hierarchical Regression Analysis on Technical Brokering in the German Immigrant Group

	β	<i>SE</i>	<i>T</i>	<i>p</i>
Step 1				
Constant		1.341	2.482	.014
Single-parent family	0.16	0.258	1.903	.059
Number of siblings	0.07	0.14	0.69	.492
Age	0.01	0.07	0.06	.953
Work father	0.01	0.12	0.02	.986
Work mother	0.12	0.09	1.37	.173
Education father	-0.13	0.15	-0.93	.352
Education mother	0.10	0.15	0.72	.475
Step 2				
Length of residence	0.16	0.03	1.37	.172
Swiss language use	0.07	0.14	0.62	.535
Ethnic acculturation	-0.27	0.21	-2.33	.021
Host acculturation	0.23	0.21	1.93	.057
Swiss language difficulties	0.07	0.23	0.71	.477
Adaptation difficulties	0.01	0.26	0.09	.921
Culture brokering	0.36	0.14	3.955	.000
Step 3				
Culture brokering x adaptation difficulties	0.18	0.35	2.009	.047
$F(15, 120) = 2.28, p = .007, R^2 = .22$				

Figure 1

Interaction of Culture Brokering and Adaptation Difficulties in the Prediction of Technical Brokering



Discussion

The starting point of this research was the question of whether technical brokering in immigrant families is rather a migration-related or a universal family phenomenon. Our results showed that technical brokering is reported in nearly all families and, hence, seems a universal family phenomenon. Among German immigrants in Switzerland, however, the overall level of technical brokering was particularly high, and these elevated levels seem to be migration-specific rather than related to the family dynamics. Moreover, technical brokering seems particularly associated with the ability of German immigrant families to cope with the transition to the new country, rather than with keeping in touch with the heritage society. Host orientation and culture brokering (particularly when families experienced adaptation difficulties) were noticeable predictors of higher levels of technical brokering. Furthermore, that culture brokering was the most important predictor for technical brokering supports the assumption that culture brokering can generalize to other domains of family responsibilities.

Our analyses showed that German immigrants reported higher levels of technical brokering than native Swiss adolescents. Results, however, also showed that adolescents from both groups highly supported their parents in technical matters. Thus, as both groups reported

assisting their parents in many technical tasks, this study highlights that technical brokering is a phenomenon that seems, to some extent, normal in Western families with access to ICT but can be fostered by migration-specific processes (Van den Bulck et al., 2016).

We were also able to show that interindividual differences in technical brokering in the immigrant sample were best explained by culture brokering, which supported the generalization assumption of culture to technical brokering, and to a lesser extent host culture orientation. Furthermore, the interaction of culture brokering and adaptation difficulties showed that high levels of culture brokering were strongly related to high levels of technical brokering when adolescents reported high adaptation difficulties. These findings, together, underscore the interpretation that technical brokering in our study was particularly associated with adolescents supporting their family in mastering the transition to a new country. However, previous research has revealed interfamilial differences in immigrant family adaptation processes. That is, some parents have to rely more on their offspring in the adaptation process than others and this support can differ depending on the domain as well as context studied. In some domains or contexts, parents were shown to be more strongly oriented to the host culture than their offspring (Aumann & Titzmann, 2018). To shed some light on this interfamilial variability, future research on technical brokering may specifically study immigrant families in which intergenerational differences in acculturation (acculturation gaps) do not follow the average trend.

Against our assumptions, a high ethnic orientation predicted lower levels of technical brokering. These findings suggest that adolescents support their parents primarily in adaptation to the Swiss culture and also use ICT to do so. Adolescents, who are more strongly oriented towards Germany, may be less supportive of this move to Switzerland. In this situation, they are probably less willing to support their parents. Similar effects based on the migration motivation are also observable in other immigrant groups (Silbereisen et al., 1999). Of course, this interpretation is somewhat speculative and requires more in-depth research.

We also found gender differences in technical brokering with males reporting that they provide technical brokering more frequently than females, in particular in the native Swiss group. The gender effect was in line with gender differences in the ICT literature (JIM, 2018). We cannot say whether the migration to Switzerland or the overall higher level of technical brokering abolished gender differences in the German immigrant sample or whether gender differences are smaller in Germany in general. The difference found calls for more comparative research including a native sample in Germany. However, this gender difference is compelling since it contradicts findings on culture brokering, which is commonly more frequently provided by females (Weisskirch, 2005). This result suggests that female adolescents do not necessarily support their parents more in general in the adaptation process —as often assumed based on

findings on culture brokering—but that only the domains of responsibilities of male and female adolescents (still) seem to differ.

Our findings, however, have to be seen against the backdrop that German immigrants are not the typical immigrants studied. They are highly educated and comparatively wealthy, with a smaller cultural distance from the host society. Hence, our results may not necessarily be transferable to immigrant groups who experience a socioeconomic decline or a large cultural distance. The results of this group of immigrants are, nevertheless, of interest in acculturation research. The findings show that some effects studied in migration research (e.g., culture brokering) can also be observed in high status immigrant groups with a small cultural distance from the host society and are not solely due to the decline in economic standing that accompanies the migration process in many immigrant groups. However, studies on individualistic and high SES immigrant families are particularly scarce, although this type of migration is the most prevalent within Western Europe (Favell, 2008). Since ageing societies are in need of a qualified workforce, research has to provide these families with evidence-based support. Future research should include diverse immigrant samples and contexts to better understand the interplay of culture, migration, and SES (Wang & Miller, 2020). Research in the future may start with studying ICT and technical brokering in other immigrant groups. Among refugees, for instance, these technologies may be used for other purposes (e.g., for keeping in contact with family and friends abroad) than among high SES German immigrant families in Switzerland.

A limitation of these findings is the different formats of assessment (paper-pencil vs. computer), which may affect the results. Using two different written formats resulted from the fact that not all schools could provide sufficient computer labs, so that in some schools only a data collection by paper-pencil questionnaires was feasible. Nevertheless, both versions are written formats and have been found to reach similar results so that it is unlikely that our results are biased (Joubert & Kriek, 2009). Another limitation is that only adolescents were studied, but no other family members. As the performance of providing cultural or technical support not only depends on the adolescents but also on the behavior of parents or siblings, it would be insightful to involve these family members in further research to holistically understand the family dynamics (Juang & Syed, 2019). Furthermore, we were unable to specify which kind of music or products adolescents purchased for their families and whether or not they were culture-specific. In-depth qualitative methods may give answers to these questions in future research.

Research on technical brokering in immigrant families is still too small in number to receive a more complete picture of these responsibilities (Guan, 2017). Research may consider even more aspects of technical support, such as the specific aims of use, technical knowledge of parents and adolescents, or access to ICT. In addition, future research may examine the interplay

of various migration-related and migration-unrelated support behaviors, together with cultural differences in family obligation values (Fuligni & Telzer, 2012) and group-specific needs. German immigrant adolescents help their parents in adapting to the Swiss context, refugee adolescents may support their parents in keeping contact with their family abroad, and native youths may provide more family support in tasks that are not covered in this study, i.e., household tasks or caring for siblings. To understand the specific tasks adolescents adopt in the family will allow practitioners to derive practical recommendations that meet the specific needs of diverse families and to provide the most appropriate support.

Given the developmental opportunities that are inherent in adolescents taking on family responsibilities (Fuligni & Telzer, 2012; Weisskirch, 2020), research may profit from the continued study of adolescents' brokering and family support in different domains, cultures, countries, and socioeconomic contexts. This research seems particularly inspiring because it complements an often deficit-oriented view on immigrant youth, with a view on their active and constructive roles in families and societies.

**5 Study 4: Acculturation Gaps in Diaspora Immigrant Adolescent–Mother Dyads:
The Case for a Domain-, Group and Context-Specific View on Family Adaptation**

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Note. Formatting has been adjusted, content is verbatim and has not been edited.

Aumann, L., & Titzmann, P. F. (2018). Acculturation gaps in diaspora immigrant adolescent–mother dyads: The case for a domain-, group- and context-specific view on family adaptation. *International Journal of Psychology*, 53, 3-12. <https://doi.org/10.1002/ijop.12524>

Abstract

Intergenerational value mismatch in immigrant families, also termed acculturation gap, is well documented. However, in increasingly diverse societies, the generalizability of this phenomenon across immigrant groups, across dimensions and domains of acculturation, and across different receiving societies is questionable. This comparative study investigated mother-adolescent acculturation gaps of two diaspora immigrant samples, who had lived in the former Soviet Union for generations, across two receiving societies (Germany vs. Israel), across two dimensions (ethnic vs. host) in two domains of adaptation (behavioural: language vs. cognitive: identity). In addition, we investigated whether these acculturation gaps are detrimental or beneficial for mother-adolescent communication. Participants comprised 342 diaspora immigrants divided into 80 German repatriate mother-adolescent dyads in Germany (adolescents' mean age: 16.9 years, 48.8 % female) and 91 Russian Jewish mother-adolescent dyads in Israel (adolescents' mean age: 15.8 years, 51.6 % female) who were interviewed in person at their homes. Results indicated diaspora-specific effects in ethnic identity, with adolescents identifying more closely with their ethnic culture than their mothers. Our study highlights that acculturation gaps can undermine parent-child-communication across both contexts, although we also found some context-specific effects.

Keywords: acculturation gaps, Diaspora immigrants, mother-adolescent dyads, family relationship, child disclosure

Introduction

Immigration is a growing phenomenon in modern societies and results in increasing heterogeneity of cultural attitudes and values. Such values are a core component of the human motivational system, guide individuals' actions, and serve as norms for the evaluation of life goals and situations (Schwartz, 2008). Therefore, they are a crucial part of individuals' identities. Research has shown that values tend to differ between cultures (Hofstede, 2001) with implications for life plans and the timing of life goals. However, values are not stable over time, since cultures may change gradually (Kashima et al., 2009). Values are particularly changeable if individuals come into personal contact with other cultures, for example through immigration. Among immigrants, values may alter, because their ethnic and/or host identity changes (Schwartz et al., 2010), or because the acquisition of a new language transports new ideas and values (Caldas, 2002). Hence, literature has uncovered two decisive fundamental questions of acculturation processes: "Is it considered to be of value to maintain one's cultural identity and characteristics?" and "Is it considered to be of value to maintain relationships with larger society?" The answers to these questions vary within ethnic groups (Berry, 2001) and even within families. Such intrafamilial differences are termed acculturation dissonance or acculturation gaps (Hwang, 2006; Szapocznik & Kurtines, 1993).

Acculturation gaps are assumed to be a central component of interactions in immigrant families. Research on this phenomenon is increasing alongside a growing awareness of the complexity of immigrant family interactions. The frequent presumption that adolescents are better adapted to the host and less adapted to the ethnic culture than their parents (Szapocznik & Kurtines, 1993) is, however, more and more questioned. Recent findings suggest that the situation is, in fact, more complex (Telzer, 2010).

The aim of this study was to address four major limitations in the current acculturation gap literature. One limitation is that studies only considered particular groups of immigrants (primarily minorities in the US) – those who have left a country of origin to reside in a new, unknown country. Hardly any research exists with regard to diaspora migrants, i.e., migrants who return to countries they deem their homeland (Weingrod & Levy, 2006). Diaspora migration is observed worldwide, for example in Israel, Germany, Finland, Greece, and countries with a colonial history (e.g., Tsuda, 2009). Diaspora groups differ substantially from well-studied groups, such as work-migrants or refugees, because they identify with the receiving society even before the actual immigration. This characteristic already indicates that their acculturation process may be more complex than that of other immigrant groups. A second limitation is that research hardly ever addresses the conditions in receiving societies, although such conditions are

crucial in explaining immigrants' cultural adaptation (Stevens et al., 2015). A third limitation is the primary focus on host culture adaptation, though immigrants' acculturation is at least two-dimensional. Host and ethnic cultural adaptation are two independent value systems (Arendts-Tóth & van de Vijver, 2006) that even predict different outcomes. Finally, most studies focus on particular domains or general (trait-like) acculturation orientations, although there is growing evidence that acculturation is domain-oriented (Arendts-Tóth & van de Vijver, 2006; Schwartz et al., 2010): immigrants may, for example, adapt in a faster pace in behavioural than in cognitive domains.

Our approach was to address these limitations in a comparative study on acculturation gaps among mother-adolescent dyads of two diaspora migrant groups from the former Soviet Union: German repatriates and Russian Jews settling down in Germany and Israel respectively. We investigated acculturation gaps across both cultural dimensions (host vs. ethnic) and in two important life domains associated with behavioural (language competence) and cognitive (identity) aspects of adaptation. In addition to addressing these limitations, we investigated the consequences of acculturation gaps for family communication. In this study, we focused on mother-adolescent dyads for several reasons. First, adolescents spend more time with mothers and disclose more information to mothers than to fathers. Second, adolescents tend to have closer, more supportive and stable relationships with mothers, and confide more in mothers than in fathers (Smetana et al., 2006). In line with previous research on acculturation, the host dimension refers to the receiving country (German or Israeli identity, German or Hebrew language), the ethnic dimension refers to the ethnic group in the former Soviet Union (German repatriate or Russian Jewish identity, Russian language). In examining identity, we focused on one facet of identity - the current identification with members of the host and ethnic society.

Diaspora Migrants From the Former Soviet Union

Diaspora migrants differ from other immigrant groups, because they share ethnic, cultural, and/or religious roots with the receiving society prior to their migration. The two diaspora groups studied here – German repatriates in Germany and Russian Jews in Israel - share various similarities. One similarity refers to their historical roots - both groups were incorporated into the Russian state in the late 18th century and flourished at first. After World War II, however, the German and Jewish populations were discriminated substantially (e.g., Germans were forbidden to speak German in public, religion was forbidden in communism and anti-Jewish attitudes spread; Shuval, 1998). Germans were deported to Siberia and Kazakhstan, which, according to historians, was also planned for Jews (Armborst, 2001). The fall of the Iron Curtain in 1989 resulted in a large (re-)migration of German repatriates to Germany and of Russian Jews

to Israel, a move that was often perceived as the return to the ancestral homeland. Another similarity refers to the adaptation to the Russian culture. Forced assimilation and the enduring contact spanning generations resulted in substantial involvement in the Russian culture. Nevertheless, discrimination, questions of identity and the support by the German and Israeli government (granting immediate citizenship, social security and material support; Shuval, 1998; Silbereisen et al., 2014) made the return to their perceived homeland attractive. Nevertheless, contrary to Russian Jewish immigrants from a first migration wave to Israel in the 1970s, who primarily migrated for Zionist reasons, Russian Jewish migrants after 1989 were primarily motivated by economic opportunities and political stability rather than migrating for ideological reasons (Al-Haj, 2004; Mesch, 2003). This group was also found to be highly secular (Al-Haj, 2004).

Although both groups share many similarities, there are also differences. The level of segregation is substantially higher in Israel than in Germany, with well-established Russian-speaking communities and infrastructures (Nauck, 2001). In addition, the migration policies between Germany (ethnic remigration) and Israel (religious remigration) differ: while German repatriates return to an actual homeland, the homeland of Russian Jews is rather symbolic. Furthermore, even though Germany is a country of immigration, Israel is much more defined by its immigrants (Silbereisen et al., 2014).

Acculturation Gaps in Diaspora Immigrant Groups

To formulate expectations regarding the direction and size of acculturation gaps, it is important to take into account several perspectives: the domain (language competence or identity), the dimension (host or ethnic), the specific group studied (diaspora migrants), and the conditions in the receiving society (Germany vs. Israel). Second-language development is a very different process for children than it is for adults: from two to twelve years of age, learning a new language occurs simultaneously with cognitive maturation and socialization (Brown, 2000), which eases language acquisition considerably. Adults, on the other hand, have to learn new words for concepts for which they have already developed cognitive structures and their brain does not have the necessary plasticity to acquire a new language at the same pace and to the same level (Brown, 2000). At the same time, adolescents' first (ethnic) language often remains at a colloquial level, because they do not elaborate age-appropriate ethnic language competences (Pavlenko & Malt, 2011). Adults speak Russian fluently due to growing up in the former Soviet Union and forced assimilation in previous generations (Nauck, 2001). One can expect these general processes to be similar across different immigrant groups and, hence, we expected higher

host language competence for adolescents (Hypothesis 1a) and higher ethnic language competence for mothers (Hypothesis 1b) in both groups studied.

However, language is not just a communication tool, but also a vehicle transporting identity, values and understanding for another culture (Caldas, 2002). Hence, better language skills and involvement in educational institutions may lead to the assumption that adolescents are more closely identified with the host culture than their mothers. However, these arguments may not hold for diaspora migrants. Diaspora migrants are in an unusual and specific situation: parents share the religious, cultural and/or ethnic background with the host society before their arrival (Silbereisen et al., 2014) and most German repatriates report that “living as German among other Germans” is a major motivation for migration (Silbereisen et al., 1999). In this situation, the parents (who usually decided to immigrate), particularly have a positive view on the host culture. This indicates that diaspora migrant mothers may be more closely identified with the host culture than adolescents are. Due to these conflicting assumptions and the scarce empirical findings regarding diaspora migrants (Tsuda, 2009), we formulated a research question rather than a hypothesis and investigated the direction of the host identity acculturation gaps between mothers and adolescents in both groups.

Similarly, research has to consider the characteristics of diaspora migrants when formulating expectations for ethnic identity. As the parents decided to leave their heritage country (the former Soviet Union) to settle in their perceived homeland (Germany or Israel), one may assume that their bond to the former Soviet Union is rather weak (Tsuda, 2009). The adolescents, however, may feel dissatisfied about being uprooted from the country in which they were brought up and in which they felt well integrated (Silbereisen et al., 1999). In addition, despite their ethnic or religious affiliation with the host society, diaspora migrant adolescents are mostly perceived as immigrants by native peer groups. This may influence their identity development in the sensitive phase of adolescence, resulting in emphasising their ethnic identity (Birman, 2006b; Persky & Birman, 2005). In conclusion, we expected that adolescents are more closely identified with the ethnic culture than their mothers (Hypothesis 2), which is contrary to earlier acculturation assumptions.

We did not formulate specific hypotheses for differences in the size of acculturation gaps between Israel and Germany, because such differences depend on many variables. For example, the size of gaps depends on country-level variables, such as the degree of segregation, that allows more or less cultural adaptation and retention, or on majority attitudes that can foster or hinder interethnic contact (Silbereisen et al., 2014). These variables may affect mothers' and adolescents' adaptation and retention similarly, or differently, producing main effects of country. In addition to these country-level variables, the immigrant groups may differ. Whereas German

repatriates returned to their ancestral homeland, Russian Jews arrived in a new country, which is rather a symbolic homeland. This may be one reason, why Russian Jews in Israel are perceived as hesitant to adjust to the Israeli (as compared to the Jewish) culture, a fact that was also termed “cultural chauvinism” in the Israeli immigration literature (Al-Haj, 2004). Hence, we did not pose specific hypotheses regarding contextual acculturation-gap differences, but explored these effects as research question.

Acculturation Gaps and Family Interactions

Answers to the question of whether acculturation gaps are detrimental or beneficial for family functioning are inconclusive. The acculturation gap-distress hypothesis (Szapocznik & Kurtines, 1993) proposes that different levels of acculturation between parents and offspring lead to acculturative family distancing and increased conflicts (Hwang, 2006). Other studies, however, found no or small associations between acculturation gaps and family interactions (e.g., Ho & Birman, 2010; Telzer, 2010). We wanted to test whether acculturation gaps relate to family communication in both samples, using child disclosure as outcome. Child disclosure measures adolescents’ “trust in their parents-whether they feel that their parents are willing to listen to them, are responsive, and would not ridicule or punish if they confided in them” (Stattin & Kerr, 2000, p. 1083). Particularly in adolescence, a period with increasing autonomy and independence, this is an important marker for a functioning mother-adolescent relationship (Stattin & Kerr, 2000). Host and ethnic language acculturation gaps may cause language and communication difficulties among family members, which in turn can undermine the bonding process (Santisteban & Mitrani, 2003). In addition, referring to the acculturation gap-distress model, the discrepancy of mother and adolescent may lead to increased conflict (Hwang, 2006). In order to minimize conflicts, adolescents may disclose less of their everyday life when acculturation gaps are larger. Therefore, we expected that mother-adolescent acculturation gaps would be associated with lower child disclosure in both countries (Hypotheses 3). Nevertheless, we also tested for differences in the association between acculturation gaps and child disclosure in Israel and Germany, to uncover group- and context-specific effects.

Method

Participants

The data came from the project “Regulation of Developmental Transitions in Second Generation Immigrants in Germany and Israel” which was part of a large research consortium on “Migration and Societal Integration”. The sample comprised mothers-adolescent dyads from the former Soviet Union belonging to two diaspora migrant groups: German repatriates in Germany, and Russian Jews in Israel. Participants in Germany were randomly selected from registry data in

two federal states in the West of Germany. Due to different data protection laws in Germany and Israel, we had to use a different sampling procedure in Israel and relied on random digit telephone screening. Therefore, Israeli data included dyads from numerous geographical regions. The criteria for inclusion in the study were membership in one of the immigrant groups of interest as well as having an adolescent' child in the age between fifteen and eighteen years, which migrated at the age of three at the latest. All mothers were born and raised in the former Soviet Union and migrated after 1989 (for more information see Silbereisen et al., 2014). For this reason, all mothers belonged to the 1990s wave of immigration and not earlier waves. The final sample comprised 342 participants: 80 German repatriate mother-adolescent dyads in Germany and 91 Russian Jewish mother-adolescent dyads in Israel. Table 1 shows the demographics for German repatriates and Russian Jews and the summary of the variables. Both groups were highly comparable on demographic variables, including adolescents' gender distribution and maternal education.

Measures

All participants were independently interviewed in person in their home environment by specially trained bilingual interviewers. The face-to-face interviews with standardized questionnaires were conducted in the language participants claimed to be most fluent in. The interviewers received specific interview guidelines that contained the exact wording for the whole interview in both the host and ethnic languages. We applied a translation-back-translation method and undertook additional pilot interviews in both groups to ensure that language versions were similar. Whenever inconsistencies emerged in these pilot tests, experts working in the study discussed and resolved the inconsistencies.

Adolescent and Mother Language Competence

Adolescents' and mothers' language competences were assessed by using an adapted scale inspired by Birman and Trickett (2001) referring to their ability to read, understand, write, and speak the host (German or Hebrew) and ethnic (Russian) language. Participants rated their abilities on a four-point-Likert-scale ranging from 1 (*Not at all*) to 4 (*Very well*). The scales revealed high reliability across the groups (host language: adolescent, $\alpha = .87$; mother $\alpha = .85$; ethnic language: adolescent, $\alpha = .80$; mother, $\alpha = .97$). We also tested for measurement equivalence across the groups by using exploratory factor analyses and the congruence coefficient Tuckers Phi (van de Vijver & Poortinga, 2002). All four scales showed a very good fit ($\phi \geq .99$) indicating equivalence of the scales across both groups.

Adolescent and Mother Identity

To evaluate host and ethnic identity, participants responded to the following one-item measures (taken from Doosje et al., 1995): “I see myself as German.”, “I see myself as Israeli.”, “I see myself as ethnic German immigrant.”, “I see myself as Russian Jew”. Mothers and adolescents rated each item on a 6-point-Likert-scale from 1 (*Strongly disagree*) to 6 (*Strongly agree*). This one-item measure was used in earlier research and was found to be a valid indicator for group identity processes (Stoessel et al., 2014).

Child Disclosure

Mothers’ perceptions of how much the adolescents report about their lives were measured using a scale from Stattin and Kerr (2000). It comprised three items: “Does your child talk at home about how she/he is doing in different subjects at school?”, “Does your child keep a lot of secrets from you about what she/he does during free time?”, “Does your child hide a lot from you about what she/he does during nights and weekends?”. Mothers rated each item on a 6-point-Likert-scale between 1 (Never) and 6 (Always). The scale’s reliability was sufficient between $\alpha = .69$ (German repatriates) and $\alpha = .67$ (Russian Jews) and the scales were equivalent across the groups ($\phi \geq .99$).

Control Variables

To measure maternal educational attainment, mothers indicated their highest level of completed education on an internationally comparable scale (International Standard Classification of Education [ISCED]) ranging from 0 (*No school leaving qualification*) to 6 (*Doctoral studies*). Adolescents’ reported their age and gender in answer to two simple questions.

Analyses

Previous studies usually operationalized acculturation gaps as mother-adolescent difference scores. However, analysing acculturation gaps as interaction, based on the individual dyads, provides more information than a difference score and is recommended for the study of acculturation gaps (Birman, 2006b; Telzer, 2010). An interaction model permits researchers to compare the impact of each type of gap while also considering the impact of main effects of maternal and/or adolescents’ acculturation. Thus, using interactions provides the greatest flexibility in examining the processes underlying the acculturation gap. To examine generation and group effects (Hypotheses 1 & 2), we conducted repeated measures ANOVAs with adolescents and mothers representing the two repeated measurement factors.

Results

The first hypothesis stated that adolescents score higher in host language (Hypothesis 1a), whereas mothers score higher in ethnic language competence (Hypothesis 1b). For both groups, adolescents scored higher in host language competence than their mothers (see Table 1); for German repatriates: $F(1,79) = 113.86, p < .001$, for Russian Jews: $F(1,90) = 159.67, p < .001$. In the ethnic language domain, results were also as expected with mothers scoring higher than adolescents; for German repatriates: $F(1,79) = 501.09, p < .001$, for Russian Jews: $F(1,90) = 319.91, p < .001$. These results supported Hypothesis 1a and Hypothesis 1b.

With regard to host identity acculturation gaps, we formulated an open research question. Analyses revealed no host identity gap in Germany, whereas adolescents in Israel scored higher than their mothers, $F(1,83) = 4.17, p < .05$. In ethnic identity, we expected adolescents to be more closely identified with ethnic culture relative to their mothers (Hypothesis 2). Data supported this assumption, albeit this was only the case in Germany, $F(1,73) = 4.87, p < .05$. Thus, Hypothesis 2 was only supported in Germany.

Table 1

Means, Standard Deviations, and Proportions of the Variables

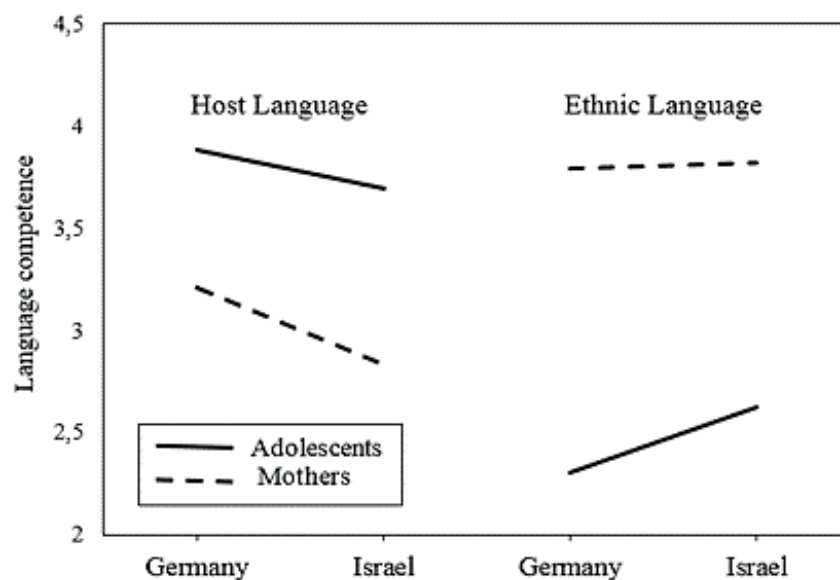
	German repatriates M (SD)		Russian Jews M (SD)	
	Adolescent (A) (N=80)	Mother (M) (N=80)	Adolescent (A) (N=91)	Mother (M) (N=91)
Age	16.9		15.8	
Gender	48.8% female		51.6% female	
Maternal education		3.87 (1.02)		4.62 (1.05)
Child disclosure		4.72 (1.09)		4.63 (1.08)
Host language	3.88 (.24)	3.20 (.52)	3.69 (.44)	2.83 (.65)
Ethnic language	2.30 (1.97)	3.79 (.62)	2.62 (.59)	3.82 (.39)
Host identity	3.19 (1.97)	2.88 (2.03)	5.01 (1.43)	4.65 (1.44)
Ethnic identity	4.56 (1.76)	3.77 (2.24)	3.34 (1.68)	3.33 (1.69)

In the next step, we explored country-level and domain-specific differences in the size of acculturation gaps by calculating interaction effects of repeated measurement factors (mother vs. adolescent) and host country (Germany vs. Israel) as well as interaction effects of repeated measurement factors (mother vs. adolescent) and dimension (host vs. ethnic) within groups. We found different sizes in acculturation gaps between Germany and Israel with regard to host and ethnic language. The analyses revealed that host language acculturation gaps were larger in Israel, $F(1,169) = 3.95, p < .05$, whereas ethnic language acculturation gaps were larger in Germany, $F(1,169) = 8.73, p < .01$ (see Figure 1). In addition, in both groups ethnic language acculturation gaps were larger than host language acculturation gaps; in Germany: $F(1,158) = 555.12, p < .001$, in Israel: $F(1,180) = 464.71, p < .001$ (see Figure 1).

All results reported so far excluded control variables, because controlling for a number of factors can disproportionately bias results of such analyses (Bernerth & Aguinis, 2016). However, the results remained virtually the same when we performed these analyses including control variables (age and gender of adolescents and maternal education).

Figure 1

Interaction of Host and Ethnic Language Competence and Context (Germany vs. Israel)



We tested the final hypothesis (Hypothesis 3), assuming mother-adolescent acculturation gaps to be associated with lower levels of child disclosure in both countries, within a hierarchical regression model. Control variables, adolescent' and maternal language competence (Model 1a for host language; Model 1b for ethnic language), adolescent' and maternal identity (Model 2a for host identity, Model 2b for ethnic identity), context (Germany vs. Israel), as well as the respective two- and three-way interaction terms were entered into one regression model (see Table 2). Context-unspecific effects of acculturation gaps would be indicated by two-way interactions of adolescent' and maternal language competence (Model 1a, 1b) or adolescent' and maternal identity (Model 2a, 2b). Context-specific effects of acculturation gaps would be indicated by three-way interactions additionally including the context variable. We have only included the models where we found associations between acculturation gaps and child disclosure in Table 2.

We uncovered no effects of acculturation gaps for the host language domain (Model 1a). With regard to ethnic language gaps, a three-way interaction effect between adolescents' and maternal ethnic language competence and context reached significance, $b = -.54$, $p < .05$ (Model 1b, see Table 2). As shown in Figure 2, acculturation gaps were associated with lower levels of child disclosure only in Germany, but not in Israel. Additional simple slope analyses for maternal ethnic language predicting child disclosure reached significance in low ($b = 1.28$, $p < .05$), average ($b = 2.31$, $p < .05$), and high ($b = 3.33$, $p < .05$) adolescent' ethnic language in Germany and low ($b = 1.10$, $p < .01$), and average ($b = .78$, $p < .01$) adolescent' ethnic language in Israel.

In the host identity domain, we found no effects of acculturation gaps (Model 2a). Regarding ethnic identity gaps, a significant two-way interaction between adolescents' and maternal ethnic identity showed that larger acculturation gaps predicted lower levels of child disclosure for both groups, $b = .07$, $p < .05$ (Model 2b, see Table 2). The direction of this effect was as expected (see Figure 3). In the ethnic identity domain, the slope for maternal ethnic identity reached significance in low adolescent' ethnic identity in Israel ($b = -.17$, $p < .05$). Thus, Hypothesis 3 was supported for ethnic language competence in Germany and ethnic identity in both groups.

Table 2

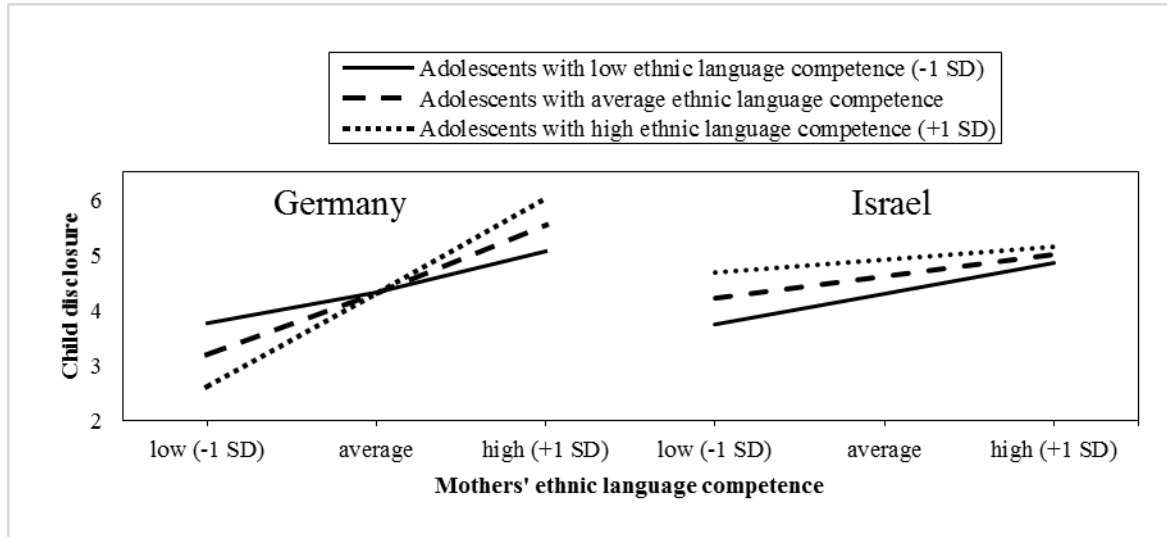
Unstandardized Regression Coefficients (Standard Error) of a Regression Model Predicting Child Disclosure Moderated by the Context

	DV: Child disclosure	
	Acculturation Domain:	
	Model 1b:	Model 2b:
	Ethnic Language	Ethnic Identity
Control Variables		
Age	-.04 (.08)	-.07 (.09)
Gender	.07 (.16)	.00 (.18)
Maternal Education	-.17 (.08)*	-.05 (.09)
Predictors		
Adolescent Ethnic Language Competence (A ^L)	.23 (.16)	
Mother Ethnic Language Competence (M ^L)	1.49 (.48)**	
Context (C)	.06 (.06)	
Adolescent Ethnic Identity (A ^I)		-.07 (.05)
Mother Ethnic Identity (M ^I)		-.02 (.05)
Context (C)		-.08 (.06)
Interactions		
A ^{L,I} x M ^{L,I}	.48 (.43)	.07 (.02)*
A ^{L,I} x C	.14 (.08)	.01 (.03)
M ^{L,I} x C	-.38 (.25)	.01 (.03)
A ^{L,I} x M ^{L,I} x C	-.54 (.22)*	.01 (.01)
R² model	.15**	.07

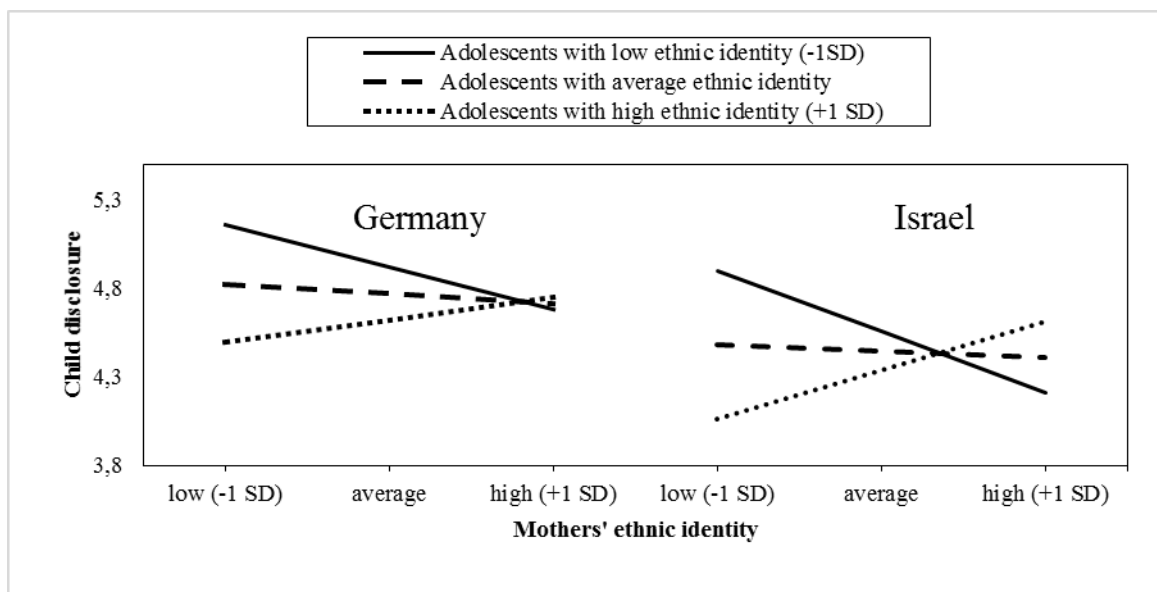
Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 2

Three-Way Interaction Between Adolescent' and Maternal Ethnic Language Competence in the Prediction of Child Disclosure

**Figure 3**

Two-Way Interaction Between Adolescent' and Maternal Ethnic Identity in the Prediction of Child Disclosure



Discussion

This study investigated intergenerational acculturation gaps and their implications for family communication in two groups of diaspora migrants from the former Soviet Union across two receiving societies (Germany and Israel). Intergenerational acculturation gaps were assessed in behavioural (host and ethnic language) and cognitive (host and ethnic identity) domains of mothers' and adolescents' adaptation. In line with earlier assumptions, our results revealed the expected acculturation gaps in the behavioural domains of host and ethnic language: Adolescents scored higher in host and lower in ethnic language competence. In the cognitive domains of host and ethnic identity, however, some of our results contradict previous models. For instance, adolescents in Germany scored higher on ethnic identity than their mothers. Since no such difference was found in Israel, this finding reveals country- or group-specific effects, which were also seen in the magnitude of acculturation gaps. The final step of analyses revealed a negative impact of acculturation gaps on family communication. Ethnic language gaps predicted lower levels of adolescent-mother communication only in Germany, whereas ethnic identity gaps predicted lower levels of adolescent-mother communication in both samples. Taken together, our results support a domain-, group- and context-specific view on immigrant family research. Considering diaspora-specific aspects seems to be especially useful, because these groups are increasing in numbers worldwide (Tsuda, 2009; Weingrod & Levy, 2006).

Some results regarding acculturation gaps revealed that “normative” gaps (adolescents are more adapted to host culture and less adapted to ethnic culture than their mothers) do not arise in all immigrant groups alike. For instance, the diaspora groups studied here only followed the predictions of previous models with regard to the behavioural domain of language acquisition and retention. In host and ethnic identity, however, adolescents always scored numerically higher than their mothers did, even though this difference was not significant in all comparisons. For host identity, our finding is still in line with earlier assumptions, because host identity may be closely allied with host language acquisition (Caldas, 2002).

For ethnic identity, however, acculturation theory may profit from a refinement with regard to diaspora-specific assumptions. Particularly German repatriate parents see their ethnic group primarily in Germany (Silbereisen et al., 1999), but adolescents may do so less. They are often perceived and treated as Russians by native peer groups (Birman, 2006b; Persky & Birman, 2005), which may actually result in adolescents emphasising their ethnic (Russian) identity. This might be one explanation for the more pronounced ethnic identity than host identity among adolescents in Germany.

In addition, further research should address and try to replicate the less pronounced ethnic identity generational difference in Israel. The fact that German repatriates returned to their

ancestral homeland, whereas Russian Jews arrived in a new country that is only a symbolic homeland, is one possible explanation for the smaller mother-adolescent ethnic identity gaps in Israel. Furthermore, smaller intergenerational ethnic identity differences in Russian Jewish families may be a result of strong Russian-Jewish networks in Israel.

It may also be that the definition of ethnic, heritage, and home differs between diaspora migrants and other immigrant groups as well as between generations. Our data cannot answer such questions, but qualitative research may help to shed light on the different meanings associated with concepts like home and host, ethnic and heritage. This may lead to even further differentiations between different diaspora as well as immigrant groups in the future.

We also found two differences in the size of acculturation gaps in host and ethnic language competence across the contexts. Adolescents and mothers in Germany scored higher on host language competences than adolescents and mothers in Israel. The mother-adolescent host language difference, however, was smaller in Germany revealing larger gaps in host language competence in Israel. Thus, family-adaptation seems to be more homogeneous in Germany than in Israel. Previous findings indicated that about 10% of German repatriates had some command of German prior to migration (Stoessel et al., 2014), which may be one part of the explanation for the smaller host language gaps in Germany.

The picture concerning ethnic language competence is different. In this domain, mothers and adolescents in Israel showed a higher level of ethnic language competence and smaller mother-adolescent differences revealing larger acculturations gaps in ethnic language in Germany. These results propose that Russian Jews in Israel maintain their ethnic (Russian) language to a greater extent than German repatriates in Germany, probably a result of the Russian-speaking community and higher segregation in Israel (Nauck, 2001).

Moreover, in both groups ethnic language gaps were larger than host language gaps, which may be due to the fact that both generations learn the new host language, albeit in different pace, whereas the adolescent's ethnic language competence withers compared to still fluently speaking mothers (Pavlenko & Malt, 2011).

Furthermore, negative associations between acculturation gaps and child disclosure were restricted to ethnic language and ethnic identity domains and were not found in the two host domains. This does not mean, however, that host language and host identity gaps do not have effects at all. Research has been using various outcomes in the study of acculturation gaps, and effects may be outcome-specific (Juang et al., 2012). Future research should define outcomes more broadly and include measures of well-being, social or cognitive functioning, and academic performance – to name just a few. Acculturations gaps in the host dimension may be relevant for these outcomes.

However, our findings underscore observations by Telzer (2010) that not all acculturation gaps have the negative effects predicted by the acculturation gap-distress model. In addition, Telzer (2010) highlighted that particularly higher ethnic orientations of adolescents compared to their parents seem to be problematic, which is supported by our data. As depicted in Figure 3, in particular one specific type of gap, if adolescents report higher levels of ethnic identity compared to their mothers, was associated with less child disclosure.

Furthermore, the replication of findings that ethnic identity gaps predicted lower levels of child disclosure in two different groups is a strong indication that ethnic identity issues are a fundamental source of family functioning. Intergenerational differences in this variable may be associated with greater conflict and communication avoidance.

Our study has several strengths, such as the inclusion of different acculturation domains in host and ethnic culture, the comparative design including two receiving societies, and the multi-informant dyad approach. Nevertheless, there are also some limitations future studies should address. A first limitation is the focus on diaspora immigrant groups alone. Comparative research comprising different types of immigrant groups, i.e., the comparison of diaspora and non-diaspora immigrants groups would be advisable, as mechanisms of adaptation may vary (Stevens et al., 2015). Furthermore, comparisons with native groups would be insightful to disentangle acculturative and generational processes. Finally, some of our measures were limited. Child disclosure is based only on maternal report and earlier research indicated that mothers tend to slightly overestimate how much their adolescents disclose to them (Titzmann et al., 2015). Other measures, such as observational data or the direct assessment of mothers knowledge across various domains of adolescents' life may be even more informative in future research. Finally, the study was only cross-sectional, so that we can make no assumptions regarding the direction of effects. Future longitudinal assessments and, even better, intervention research may be more informative.

Our study corroborated earlier findings from primarily North American studies: There seem to be intergenerational acculturative differences, even in diaspora migrant families, and such differences can be negatively associated with family and adolescent functioning, such as family communication. Nevertheless, our study also adds several novel aspects to this literature. One is to consider the specific situation of immigrant groups. Acculturation theory was primarily developed in research with work-migrants and minorities. Our study shows that the assumptions made from the findings in these groups only partly hold among diaspora migrants. These findings have implications for research: it should target the specific situation of immigrant groups more, elaborate on the domain- and dimension-specificity of acculturation processes, and take into account the context of adaptation. Only then, acculturation research will be able to provide the

necessary measures for a better adaptation of immigrants tailored to the specific needs of each individual group.

6 General Discussion

The main aim of this dissertation was to investigate immigrant adolescents' active role in their own and their family's adaptation processes and to determine how it is related to the psychosocio-cultural adjustment of the whole family. The goal was to increase the understanding of the active and constructive roles that adolescents can adopt in families and to derive implications for the successful adaptation of adolescents and other family members. Specifically, to achieve this goal, I pursued two major research aims: (1) to examine two forms of adolescents' active role in the family, direct and evocative adolescent influence, and establish whether they are related to positive and negative familial psychosocio-cultural adjustment; and (2) to investigate whether processes regarding direct adolescent influence and evocative adolescent influence and their associations with family adaptation outcomes are universal or specific across immigrant families, focusing on the key factors migration conditions and acculturative timing.

To achieve these aims, I conducted four empirical studies, based on three data sets of adolescents and their families comprising five ethnic groups in three countries. In doing so, I pursued a multi-informant, comparative, and dynamic approach in this dissertation. In Chapters 1.6.2 and 1.6.3, I summarized my research aims and how the presented studies addressed them (see also the conceptual model in Figure 1). In the following sections, I provide an overview of my key findings in connection to my research aims and elucidate which results of my studies empirically support these key findings. I then discuss the strengths and weaknesses of the presented research and outline implications for future research. Finally, I derive practical implications and draw a conclusion.

6.1 Research Aim 1a: Direct Adolescent Influence on Family Adaptation

The first research aim was to examine direct adolescent influence on the family and its associations with family-related adaptation outcomes. I addressed this research aim in Chapters 2 and 4, in which I drew on a sample of native German adolescents in Germany and native Swiss and German immigrant adolescents in Switzerland. In sum, my studies revealed two main findings. First, I found substantial evidence of direct adolescent influence on the family in the form of instrumental and emotional family support as well as culture and technical brokering. This active role of adolescents in their family was prevalent independent of ethnic group membership, which reflects the meaningful role that adolescents can adopt in regulating family processes. Second, my studies showed associations of adolescents' active role with positive and negative psychosocio-cultural outcomes of the whole family. In sum, the studies revealed that adolescents are not only active leaders of family dynamics but also both youths and their families can benefit from this development.

Concerning the first main finding, I found empirical evidence of direct adolescent influence on the family by providing different forms of family support in both chapters. In Chapter 2, adolescents of one native and two immigrant groups reported substantial levels of instrumental and emotional support for their parents. Further, immigrant adolescents in this study reported directly supporting their parents in culture-related tasks (culture brokering). Moreover, in Chapter 4, the analyses revealed immigrant and native adolescents' direct support for their parents in technical tasks (technical brokering) as well as substantial levels of culture brokering among the immigrant sample.

In addition to the confirmation of direct adolescent influence in (ethnically) diverse families, both chapters also revealed that adolescents' active support for their families in different domains can be interdependent. In Chapter 2, among immigrant families, culture brokering was strongly related to general family support. Chapter 4 supported this result by confirming the interplay of adolescents' culture and technical brokering for parents. These findings revealed a kind of generalization effect of direct adolescent influence on families: adolescents' support in (migration-) specific domains can expand so that adolescents also adopt a more active and meaningful role in other, more general and/or migration-unspecific domains of family life, for example technical tasks or keeping the emotional balance in the family (Kam & Lazarevic, 2014a). This evidence of adolescents' direct and active support in the family in my studies is particularly compelling since I confirmed it in different domains—migration-specific, technical-related, and migration-unspecific general family tasks.

Secondly, I found relations of adolescents' active role in the family with regard to direct adolescent influence with various positive and negative outcomes for the family, including the adolescents themselves. In Chapter 2, analyses revealed that actively supporting parents in instrumental and emotional tasks can be related to higher levels of adolescents' exhaustion. Remarkably, adolescents in this study did not differ in whether they perceived their role or amount of provided support as unfair regardless of their levels of exhaustion and direct family support. This indicates that adolescents may accept their (active) role in the family - potentially in particular if they consider their support as necessary - even if it means (more) effort for them (Fuligni & Telzer, 2012). Results of this study also highlighted that adolescents' direct family support can be related to positive psycho-social development, which was shown in higher levels of self-efficacy among adolescents. Interestingly, negative (unfairness and exhaustion) and positive outcomes (self-efficacy) were not related with each other. These findings underscore the need to include positive and negative outcomes in research on adolescents' active role in the family because adolescents' direct support appears not to be simply positive or negative for adolescents' psycho-social adjustment. Moreover, analyses of Chapter 4 showed that adolescents'

direct support can also promote families' socio-cultural adjustment by revealing strong associations of host culture orientation and adaptation difficulties with technical brokering. Thus, direct adolescent support can be a noteworthy opportunity for immigrant families by promoting adaptation and integration into the host society. These findings are in line with research that has emphasized the potential of adolescents' active participation in family interactions for the adolescents themselves, such as promoting positive development and more rapid development of skills and competencies (Motti-Stefanidi & Masten, 2017), as well as for the family in successfully managing daily life and adjusting in new contexts (Lerner et al., 2012; Weisskirch, 2020).

Taken together, the findings clearly stress how far-reaching and fundamental adolescents' active and direct participation in the socialization and enculturation processes of families can be and how frequently parents appear to rely on their offspring in their adaptation processes. Although adolescents' direct support can also be related to negative outcomes, my results emphasize that more research on adolescents' direct influence in the family is worthwhile since it may uncover various opportunities for developmental growth. That is, instead of focusing only on the negative aspects, future research needs to concentrate more on the opportunities that can arise from adolescents' active role in families. In doing so, research should also examine and weigh costs and benefits of adolescents' agency in families over time to derive the best possible developmental and adaptive recommendations for youths and their families in the long term rather than just deriving short-term assumptions. Insights in this regard are particularly important since immigrant adolescents' adoption of an active role in adaptation processes appears to be a valuable resource for their family: they often guide—at least to some extent—their families through the new country, a task that should be valued and appreciated more in future research and our society and not devalued by a too one-sided view on such processes (Motti-Stefanidi & Garcia Coll, 2017).

6.2 Research Aim 1b: Evocative Adolescent Influence on Family Adaptation

The second research aim was to examine evocative adolescent influence on the family and its relations with family interactions and adaptation. I targeted this research aim in Chapters 3 and 5, in which I investigated whether and how diaspora immigrant adolescents' acculturation process (e.g., changes in attitudes and behaviors) can indirectly affect family interactions. Taken together, my research disclosed two key findings. First, my studies demonstrated that not only direct, intentional family-targeted activities of adolescents can affect family outcomes but also that mere attitudinal and behavioral changes of adolescents without direct impact on the family can be related to changes in family dynamics. Thus, I found evidence of evocative adolescent

influence on the family. Second, the analyses revealed relations of evocative adolescent influence with both negative and positive psycho-socio-cultural family outcomes. In this respect, the findings together highlighted that adolescents' (acculturative) development should not be considered without the contexts in which it takes place - for example the family - because they can directly and intentionally but also indirectly and unintentionally influence each other's development and adaptation.

In this dissertation, evocative adolescent influence was examined by relations of adolescent attitudinal and behavioral acculturative changes with family interactions, focusing on acculturation in language use and cultural identification. I found evidence of evocative adolescent influence in Chapters 3 and 5. In Chapter 3, I used a longitudinal approach to investigate whether the (change) process of immigrant adolescents' host language adoption was related to family interactions over time. I found relations of adolescents' changes in language use with family hassles and child disclosure, which, thus, supported the significance of evocative adolescent influence on family dynamics in host culture domains. In Chapter 5, I expanded on the findings of Chapter 3 and also included acculturation processes in ethnic culture domains. I found evidence for adolescents' active role and management of acculturation processes in host and ethnic language and ethnic identification: adolescents reported higher levels of the host language and ethnic identification and lower levels of the ethnic language than their parents. Moreover, intergenerational acculturation gaps in ethnic culture domains were related to family interactions, whereas intergenerational acculturation gaps in the host language showed no associations with family functioning. This leads me to the second main finding. The presented studies revealed that adolescents' agency in acculturation can evocatively affect family interactions in a negative as well as positive direction. In Chapter 3, adolescents' acculturative changes in the host language were related to higher levels of child disclosure and higher levels of family hassles. Thus, this study complements Chapter 5, in which I found relations of acculturation gaps in ethnic language and ethnic identity with lower levels of child disclosure but no relations of adolescents' active role in host culture acculturation with family interactions or with positive family outcomes. The findings on ethnic culture processes of Chapter 5, however, corroborate previous findings that particularly intergenerational differences in ethnic orientations seem to cause stress in families (Telzer, 2010). This is an important result because most research on the associations of adolescents' and parents' acculturation has focused on host culture adaptation and neglected acculturation processes with regard to the ethnic culture. That this finding was confirmed in two different immigrant groups is a clear indication that ethnic culture issues and adolescents' role in managing these adaptation processes are a fundamental source of family functioning (Benbow & Aumann, 2020). The results of both studies together also indicated that the consequences of

evocative adolescent influence for the family may depend on the outcomes and domains of investigation and the salience that adolescents' acculturative changes have for the family. Adolescent development and adaptation that is particularly significant in the private (family) context, such as the sharing of values and religious beliefs or speaking the ethnic language, may be more disruptive or incisive in family interactions than changes that are primarily important in the public sphere (e.g., adoption of host behaviors; Ward & Geeraert, 2016). Potentially, acculturation gaps in host behaviors or identification are more relevant to other family outcomes, such as the amount of time the family spends together.

In sum, the studies undertaken in my doctoral research show that adolescents' active role in (families') acculturation is relevant not only in host culture adaptation processes and when adolescents directly and intentionally support family members (e.g., direct adolescent influence in the form of brokering) but also in ethnic culture domains and when adolescents evocatively and unintentionally affect family life. Chapter 3 reveals that adolescents' host culture adoption can be related to family interactions, whereas Chapter 5 shows that adolescents' active and independent agency in acculturation in ethnic culture attitudes and behaviors can affect parent-child relationships. Thus, my findings on evocative adolescent influence suggest that even if adolescents do not intend to influence their family, their self-determined development can still unintentionally change family dynamics and deteriorate but also enhance family relationships. Conversely, this also implies that adolescents developmental processes cannot be considered independent from the family context and influence, or respectively of other developmental contexts of adolescents (e.g., peers; Jugert et al., 2020). Moreover, these results also supported my findings regarding direct adolescent influence on the family that the risks and opportunities of adolescents' active development can go hand in hand (Suárez-Orozco et al., 2018). This implies that, to this date, migration may often be predominantly associated with risks for families because positive effects of migration remain as yet underexposed in existing research (Shen et al., 2019). In this respect, my studies add to current research by underscoring that adolescents' active role can foster and promote youths' and families' development. Thus, in further studies, it is important to build on these findings to be able to capitalize on these opportunities for immigrants in the future. Moreover, research may need to move away from investigating purely positive and negative outcomes of adolescents' active role in the family and rather study the interaction of these two sides over time. Initial research has shown, for example, that family hassles (a typical negative outcome in family research) can also be adaptive over time because they can enrich family relationships by improving communication and promoting intrafamilial understanding (Stuart et al., 2010). This may also apply to adolescents' active role in families because it is an important developmental step for adolescents to become independent self-determined individuals

from whose successful development not only families (even if adolescents' developmental growth and change may worry them at first) but also societies can benefit in the long-term (Lee et al., 2016).

6.3 Research Aim 2a: Migration Conditions

The next research aim was to determine whether and how migration conditions are related to adolescents' active participation in family enculturation and socialization processes to derive indications of universality and specificity of adolescents' active role across diverse immigrant families. Accordingly, I investigated understudied group- and context-conditions in every study of this dissertation to identify specific (only applying to particular migration conditions) or potentially universal (may be transferable to other immigrant families) processes of adolescents' direct and evocative influence and its relations with (positive and negative) family adjustment. In sum, my research revealed relations of direct and evocative adolescent influence with family adaptation and adjustment in diverse immigrant groups in various contexts. However, my results also highlighted that the occurrence and outcomes of adolescents' active role can depend on (at least) two key factors among families in the migration process: first, context-characteristics such as societal heterogeneity or segregation and, second, group-characteristics such as pre-migration knowledge about the host culture. Thus, from an overall perspective, my findings indicated that adolescents' active role in the family may be universal in that it appeared to be prevalent in nearly all immigrant (and native) families studied, but the levels and outcomes of adolescents' active role in the family can differ depending on group- and context-characteristics.

First, my studies revealed direct and evocative adolescent influence on the family in different host societies, but relations of adolescents' active role and family adaptation and interactions were partly context-specific. That is, I found that outcomes of adolescents' active role for family adjustment were dependent on contextual factors, indicating specificity. In Chapter 5, the results revealed country-specific effects in the magnitude of acculturation gaps, signifying that context conditions can affect the extent to which adolescents (actively) grow apart from their parents in the acculturation process. Moreover, associations of acculturation gaps with family relationships (lower levels of child disclosure) were stronger in Germany than in Israel. Thus, the results of this study implied that conditions in the German society, potentially lower levels of segregation (Tsuda, 2009), can foster parents' negative perception of adolescents' self-determined acculturation. This is in line with findings that suggest that the ethnic composition of the host society can affect adolescent and family acculturation and related changes in family dynamics (Schachner et al., 2018). Context-dependency of adolescents' role in the family was also shown with regard to direct adolescent support for families. In Chapter 2, I found that

adolescents in Switzerland provided higher levels of instrumental and emotional support for their family than adolescents in Germany—independent of a migration background. One reason for this result may be the more challenging work–family compatibility in Switzerland (Crompton & Lyonette, 2016), which can result in parental time constraints in families and can necessitate higher involvement of the offspring in the family. These results, together, suggest that various aspects of immigrant families’ environment can affect adolescents’ active and self-determined management of acculturation processes and its active role in family processes. Moreover, they imply that context-characteristics can explain - to some extent - why some adolescents support their families more than others, knowledge that should be incorporated into models on adolescents’ active role in the family. However, what exactly explains the different results in the contexts studied is so far speculative and needs more in-depth and/or comparative research.

The second key finding was that my studies confirmed adolescents’ active role in the family in five ethnic groups, but that group characteristics can codetermine how adolescents’ active agency in families unfolds. Specifically, the results indicated that group-characteristics that have been shown to apply more frequently to certain immigrant groups than to others (e.g., high parental workload; Piedra & Engstrom, 2009) can foster adolescents’ active role in family processes, indicating specificity. Using person-oriented analyses in Chapter 2, I found that direct and migration-unspecific adolescent family support can be nurtured by difficult family circumstances, including divorce and high parental workload. These circumstances have been shown to be overrepresented among immigrants with particularly high (and accredited) and low (or not accredited) qualification levels (Favell, 2008; Portes et al., 2005). However, the analyses also indicated that such family characteristics can explain more variance in adolescents’ active role in the family than ethnic group-membership since native and immigrant families with comparable characteristics differed neither in the levels of adolescents’ support nor in the consequences for psycho-social adaptation. Thus, to increase the understanding of adolescents’ role in family processes, research needs to consider the differences between (diverse) ethnic groups but also the variance within ethnic groups, for example by person-oriented approaches. Besides family characteristics, Chapter 3 suggested that the migration motivation and pre-migration knowledge of the receiving society of immigrants can change the role that adolescents adopt in their families as well as parents’ perception of adolescents’ self-determined acculturation. In the diaspora immigrant sample, adolescents’ fast host culture adoption was related to more child disclosure. Research on other immigrant samples would rather assume decreasing child disclosure because fast adaptation typically represents adolescents growing apart from their parents (Telzer et al., 2016). Thus, parents appeared to appreciate adolescents’ active host culture orientation, resulting in closer parent–child relationships. This result may be specific

to immigrant families, which are characterized by high motivation to integrate into the new society, such as diaspora immigrants (Tsuda, 2009).

These findings, taken together, allow several conclusions. The first one is that my studies emphasize a potential universality of adolescents' active role in general because they confirmed direct and evocative adolescent influence on family adaptation in diverse families belonging to different ethnic groups in different contexts. This indicates that the assumption derived from my studies that immigrant adolescents play an active role in family processes may also be transferable to other groups and contexts. However, my studies also revealed that relations of adolescents' active agency in acculturation with family adaptation and adjustment can differ in intensity and outcomes among different ethnic groups and in different contexts. Another important conclusion of the presented research is that it is not only migration per se that can foster adolescents' active role in family interactions but rather certain conditions and characteristics of families, such as marital conflicts or high parental workload. Such characteristics can, however, be amplified by migration (Portes et al., 2005; Xie & Greenman, 2011). The predictive power of culture- and ethnic-unspecific family characteristics (e.g., parental divorce) also suggests that examining such multi-faceted processes on a family level instead of making general assumptions about immigrant family dynamics may enhance our understanding of adolescents' role in families. In sum, to avoid overgeneralizations and gain insights into the generalizability and specificity of findings, this doctoral research highlights the need for more diverse samples when examining adolescents' active role in family processes and carefully considering to what extent the sample studied is representative for other immigrant families (Titzmann et al., 2020). This is an important step since most of the present research has been conducted in collectivist, low-SES groups in the US and thus does not reflect the diversity of migrating groups and receiving contexts (Wang & Miller, 2020). Finally, acculturation theory should advance the assumptions on why particularly immigrant adolescents support their families. Instead of supposing adolescents' active role in families to be simply migration-specific, research needs to go beyond group-membership and to investigate which (diverse) cultural and contextual family settings may foster adolescents' active role in families and acknowledge that immigrant families are a highly diverse group.

6.4 Research Aim 2b: Acculturative Timing

The last research aim was to establish whether adolescents' active participation in family enculturation and socialization processes is dependent on the timing of acculturation processes. To achieve this aim, I investigated how the pace of adolescent acculturation is related to family interactions over time (Chapter 3). In addition, I addressed this aim in Chapter 5, in which I

examined how (differences in) adolescent and parental acculturative timing are linked to family communication. The findings of my dissertation revealed two main results. First, they highlighted that particularly rapid changes in adolescents' acculturation affect family adaptation outcomes. Second, they exposed the dynamic character of adolescents' acculturative development and showed that acculturative timing can differ between generations but also between domains, with different outcomes for family interactions.

Firstly, I found that adolescents' acculturative pace, that is the speed of adolescents' acculturative changes, can be a decisive factor in explaining different family outcomes of adolescents' active agency in acculturation processes. In Chapter 3, I found that it is not necessarily the (higher) level of adolescent host adaptation as compared to parents per se that affects family relationships. Rather, the speed at which adolescents develop seems to determine how parents respond to adolescents' changes and adaptation because a faster pace was strongly related to higher levels of family hassles and child disclosure. These results are in line with findings of developmental psychology that the parental ability and opportunity to cope with adolescents' developmental changes are highly decisive in explaining the consequences for family relationships (e.g., Mendle, 2014). Hence, family outcomes of adolescents' active agency in developmental processes may depend on how adolescents' active role unfolds in the family—faster changes may increase the impact on parent–child relationships. Moreover, this study showed particularly strong associations of adolescents' acculturative pace with family interactions when families were recently migrated. Thus, adolescents' active, independent role in acculturation processes may be more influential in families in the early stages of the acculturation process. This suggests that adolescents' adaptation processes affect family interactions particularly when the family is vulnerable, such as at the beginning of the acculturation process (Ward et al., 2001).

Secondly, I found evidence for the dynamic character of adolescents' (and families') acculturation process beyond interindividual differences in trajectories of acculturative change (acculturative pace). Analyses in Chapter 5 showed domain-specific differences in adolescents' acculturative timing. Moreover, I found that this domain-specific acculturative timing of adolescents was differentially associated with family interactions. Whereas most adolescents adopted the host language rapidly, they reported slower identification with the host culture, suggesting asynchronous acculturation processes of immigrant youths (Titzmann & Lee, 2018). Thus, these results implied that, in most cases, immigrants do not acculturate linearly and that asynchrony in acculturation domains is more likely to be the norm rather than the exception (T. K. Lee et al., 2020; Wang & Yip, 2020). This should also be considered when studying adolescents' active role in (family) acculturation and adaptation processes. In this respect, my

results also confirmed that the implications of adolescent faster or slower acculturative timing for the family can depend on the domain studied: whereas an advanced relative timing of adolescents compared with parents in the host language or identification was not related to family outcomes, the opposite was the case for ethnic language or identification. Interestingly, these analyses also revealed that advanced adaptation of parents to cultural values or behaviors compared with adolescents was linked to lower levels of intrafamilial communication. Thus, adolescents' self-dependent regulation of behavioral and attitudinal acculturative changes was related to family dynamics when adolescents adjusted at a faster pace than their parents but also when adolescents showed slower adaptation than their parents. These results add to recent studies suggesting that adolescents may have different views on ethnic and host culture acculturation, with different effects on family interactions and relationships (Genkova et al., 2014; Noels & Clément, 2015; Ward & Geeraert, 2016). Regarding adolescents' active role, this suggests that their self-determined active agency in the process of acculturation can affect the family in some domains more than in others.

In sum, my results emphasize that the process of adolescents' active role in immigrant family adaptation and its consequences can be dependent on different timing aspects in the families' acculturation process. Thus, based on my findings, adolescents' adoption of an active role cannot be assumed to be a universal process that unfolds similarly among all immigrants. Accordingly, it is worth looking beyond general and static measures and directions of intergenerational differences in the dynamics of acculturation and investigating what exactly happens in the enculturation and socialization processes within families over time, particularly with regard to acculturation processes. In this respect, this dissertation confirmed the significance of different timing aspects in research on adolescents' and families' adaptation processes: above all acculturative pace, but also relative timing compared with parents, length of residence and domain-specificity of acculturative timing. All these timing characteristics were shown to have a considerable impact on how parents react to acculturative adaptation of adolescents in a new cultural context (R. M. Lee et al., 2020; Ward & Geeraert, 2016). Taken as a whole, my findings clearly demonstrated that considering acculturative timing can increase our knowledge of the conditions under which families can best benefit from adolescents' active role in (cultural) development and adaptation and why adolescents' acculturative change can cause more or less stress for the family. Accordingly, the impact of acculturative timing may also explain contradictory findings of existing research, that is, why some studies have reported negative family effects of adolescents' active engagement in acculturation, some have identified positive effects, and some have shown no effects on family interactions (Telzer, 2010). Thus, to derive

comprehensive conclusions, more (longitudinal) studies on adolescents' acculturative timing and its impact on family interactions are required.

6.5 Superordinate Goal

The overarching goal of my dissertation was to investigate adolescents' active role in immigrant family adaptation processes. In doing so, I derived two forms of adolescents' active role in the family from existing research—direct and evocative adolescent influence. Returning to my conceptual model (Chapter 1.6.3, Figure 1), this doctoral research provided evidence for all the presented research aims: the empirical studies in this dissertation confirmed consistently that adolescents are actively involved in family adaptation in both suggested ways—directly, by providing different forms of family support, and evocatively, by affecting family life through their own acculturative development. Both forms of adolescent influence were shown to have positive and negative implications for family adjustment and, thus, there is no simple answer to the question of whether adolescents' active role in family adaptation is an opportunity or a risk for families. My findings suggest that issues and difficulties (e.g., increasing family hassles) that may emerge from adolescents' active agency can be accompanied by opportunities for families such as enriching interactions or promoting their development and adaptation. In this respect, it may also be an important point for theory and practice to recognize that development cannot be assumed to be generally positive or negative but that the costs and benefits of developmental and acculturative progress always need to be considered simultaneously. I also identified several relevant conditions - ethnic composition of the new environment, migration motivation, and speed of acculturative change, to name only a few - that can affect the occurrence and outcomes of adolescents' active role in familial acculturation process, indicating specificity. Thus, this dissertation provided evidence of adolescents' active and independent management of developmental processes, advanced the idea that adolescents adopt an active and important role in immigrant family processes, highlighted that adolescents' active role can provide opportunities for the psycho-socio-cultural adjustment of whole family, and allowed insights into its universal and specific aspects across ethnic groups and diverse contexts and depending on acculturative dynamics.

6.6 Strengths and Limitations of the Presented Research

An overall strength of my research is that it addressed two big gaps in the current acculturation literature: limited studies on the benefits of (adolescents') acculturation processes and limited studies addressing the diversity of nowadays migration flows. A stronger emphasis on strength-based approaches has often been demanded in the acculturation literature (Barbot et al., 2020; Suárez-Orozco et al., 2018). My research demonstrated the importance of responding to

this request as I was able to prove different positive outcomes of (rapid) self-determined adolescent acculturative development, such as closer parent–child relationships or higher self-efficacy of adolescents. Second, identifying specificities in acculturation processes resulting from the diversity of immigrant groups and migration contexts is crucial since it can resolve inconsistencies in the acculturation literature. For this reason, I examined my research questions with different, understudied groups of immigrant families (diaspora and high-SES immigrants, context variations) that challenged the findings on frequently studied groups and that can provide evidence for specificity or universality of immigrant family processes. Nevertheless, the groups and contexts of this doctoral research, even in combination, cannot be considered a representative sample of the overall population of migrant families. As one example, my studies only focused on first- and second-generation immigrant adolescents. Whether these findings are transferable to other migrant groups such as refugees, who face other or additional challenges, requires further research. Notwithstanding, also research on single or specific migrant groups, as well as indications of universality or specificity based on these samples, enable acculturation interventions to be tailored to be more successful and to lead acculturation policies to new levels of effectiveness (Bornstein, 2017). The investigation of diverse samples and contexts was sustained by comparative approaches in my studies, also including native adolescents and their families. This allowed me—to some extent—to gain insights into the roles of ethnicity, migration, culture, and context in family phenomena (Wang & Miller, 2020). Unfortunately, I was not able to investigate one ethnic group in different contexts, which limited the generalizability of my findings (Benbow & Aumann, 2020; Titzmann et al., 2020). The generalizability of my findings on adolescents' active role to other age-groups of the families' offspring is also unclear. In my research, I chose adolescents as the target group because the influence of the offspring on family life is assumed to be the strongest in adolescence, which is explained by the interplay of general normative and acculturative development in adolescence (Juang & Syed, 2019). Since individuals at other stages of development (e.g., adolescents vs. grade-schoolers vs. preschoolers) face other developmental and/or acculturative challenges (Reitz et al., 2014), it is unclear whether the results can be generalized to younger children in immigrant families. Moreover, although I conducted some comparative research on the behavior of immigrant and native adolescents and their influence on the family, I was not able to disentangle acculturative and developmental influences in the adolescent behavior properly by means of my findings. However, this disentangling of development and acculturation in adolescent behavior may help future research to derive more specific recommendations for the successful adaptation of immigrant families (Jugert & Titzmann, 2019). Another limitation of my research is that I was not able to include more characteristics of the adolescents themselves. Thus, based on my

research, it is uncertain whether and how adolescent characteristics such as intelligence or personality factors, for example adolescents' extraversion or conscientiousness, affect their role in the family (Mastrotheodoros et al., 2020). More mature, intelligent, or extroverted adolescents may provide more brokering, such as translating during official visits, than other adolescents. In addition, I investigated my research questions only with existing data sets. Despite the advantages mentioned earlier, this led to limitations in sample and variable selection.

A further strength of my research was the use of dyadic data in examining adolescents' active role in the family, mainly referring to mother–adolescent dyads. As family adaptation and interactions depend not only on the adolescents but also on the behavior of other family members, such as parents, it is crucial to involve these family members in future studies. Data from other members of the household, such as fathers, siblings, or grandparents, could create an even more complete picture of the complex interplay of family members' behaviors and be less biased than self-reports by adolescents (De Los Reyes & Ohannessian, 2016). Combining and relating responses from different family members would provide insights into familial dynamics from individuals with varying but direct involvement in these family processes, resulting in increased sophistication as well as objectivity of findings.

Finally, I investigated longitudinal data in some of my research, which allowed me to gain insights into the dynamics of family acculturation processes. Particularly in a developmental phase that is generally associated with great potential for changes in family interactions, such as adolescence, longitudinal studies of my cross-sectional findings are indispensable to decipher the migration- and development-related processes that may shape adolescents' active role in families' socialization and enculturation. Longitudinal data are also needed to address the direction of effects and expose causal inferences of variables. This relates to predictors but also outcomes of adolescents' active role in families, which can be particularly important for understanding relations of positive and negative consequences for family dynamics. Previous findings have indicated, for example, that originally negative consequences of adolescents' active role in family adaptation, such as conflicts, can turn into opportunities for the family by enriching their communication or prompting the members to discuss family roles (Stuart et al., 2010). Thus, longitudinal studies are necessary to understand the long-term outcomes of adolescents' participation in family processes as well as the origins of and reasons for adolescent and familial behavior and attitudes.

6.7 Implications for Future Research

Based on my findings, and in addition to the points mentioned with respect to the limitations of this doctoral research, I have derived important next steps for future research. To

overcome existing gaps in theory and empirical evidence, it will be important to investigate my findings on adolescents' active role in family adaptation processes with, on the one hand, more detailed data with regard to the measurement method and frequency of data collection and, on the other hand, more diverse data concerning ethnic, cultural, and contextual specificities.

To target the first point, I suggest at least two different ways to investigate adolescents' and their families' acculturation process in more detail. First, it may be insightful to move beyond questionnaire data and study adolescents' role in the family with observational data, potentially combined with qualitative or quantitative interview and/or questionnaire data. Observational data have the advantage that information is not filtered through the perceptions of the involved family members (Couteur & Gardner, 2009). Accordingly, one may confront (immigrant and native) families with tasks and problems, which are related to, for example, general family responsibilities, technical issues, and migration-specific domains, as targeted in my research, and observe how they solve these tasks, how they communicate, and how they distribute the responsibilities. This approach would expand directly on my studies and complement the results by providing more detailed insights into the processes through which adolescents gain influence in the family, why some adolescents adopt more and some fewer responsibilities in families, and whether the processes differ depending on the task.

A second approach to build on my findings and address existing research gaps would be to examine adolescents' role in family adaptation with more detailed data in terms of different types of longitudinal assessments. Immigrant adolescents undergo two decisive developmental processes when growing up in new environments, which are also assumed to shape the role they adopt in the family context: acculturative and normative adolescent development. Both acculturative and normative developmental changes occur in the long term (months and years—"macro" level) and on a daily basis (days and weeks—"micro" level), and first studies have indicated that change in acculturation and developmental processes over both spans of time may be characterized by different patterns and correlates (Schwartz, Szabó, et al., 2020). Thus, addressing the two levels of processes (i.e., days/weeks vs. months/years) simultaneously by combining large questionnaire studies with micro-questionnaires using ambulatory assessment via smartphones, wearables, or other devices may vastly increase the understanding of the process that immigrant adolescents undergo in a new environment. Accordingly, to address changes on a daily basis, the use of ambulatory assessment and related methods (e.g., experience sampling) can facilitate the assessment of the real-time dynamics of adolescent and intrafamilial processes. Ambulatory assessment is a highly valid method to assess behaviors and feelings directly in daily lives over a short period of time, which results in high compliance of participants and reduces recall bias (van Roekel et al., 2019). Therefore, it may be particularly suitable for investigating

immigrant adolescents' influence and role in family adaptation (e.g., parentification) as such behavior typically occurs regularly in everyday life and could, thus, be recorded immediately by the adolescents (Tsai et al., 2013). Among others, this may help to provide more valid information about the frequency, timing, and intensity of such family processes. To address long-term changes (over months and years) in immigrant adolescents' but also families' adaptation and interactions, longitudinal studies are inevitable. Similar to acculturation, family interactions can also be regarded as having a definite starting point (e.g., birth of the child, decision to migrate) from which behavior and processes can co-determine the (lifelong) development of the family (Titzmann & Lee, 2018). Therefore, process-oriented research at best over the entire life span of a family should cover not only adolescent development but also familial development and capture trajectories, predictors and correlates of these long-term, probably lifelong, change processes. Regarding immigrant adolescents' development, longitudinal assessments allow to unravel the underlying driving processes of adolescents' longitudinal growth in new societies. In this respect, they may also enable to disentangle developmental and acculturative sources of changes in adolescents' active agency and family dynamics (Juang & Syed, 2019; Jugert & Titzmann, 2019; Schwartz, Szabó, et al., 2020). Regarding family dynamics, longitudinal assessments allow to understand the antecedents of adolescents' support in families (e.g., how adolescents developed the skills that they need to support the family), the interactions of adolescents and their families that are shaped by the development and adaptation on both sides (e.g., why some families rely more on their offspring than others), and the long-term consequences of adolescents' active role in the family (e.g., whether initially negative outcomes can still have a positive effect in the long term). By this means, the interplay of positive and negative outcomes can also be studied more closely to answer questions such as what development progress and changes come at what cost for family life.

To target the second main point, my findings highlighted the importance of paying greater attention to variability of social contexts (e.g., different host societies with differing expectations regarding developmental and acculturative tasks) and variability between different groups of migrants (e.g., recent refugees from Syria vs. more established immigrant groups). Studying samples representative of diverse migrant families throughout the world would therefore be desirable to investigate the generalizability of findings, but is in most cases hardly achievable. However, carefully designed comparative research can shed light on whether results concerning (im)migrant adolescents' and their families' adaptation are specific to one particular (im)migrant group or context or whether they can be transferred to other groups and contexts (Bornstein, 2017). Accordingly, a third approach to expand directly on my studies and complement my findings would be to match families of different migrant groups (e.g., first and second generation

immigrants, seasonal migrants, refugees) in the same context or families of same (im)migrant group in different contexts and examine how adolescents are involved in adaptation processes in these families and whether or not these families develop and adapt similarly: for example, one may match families with different ethnic origins in Germany based on their SES, knowledge about the host culture and behaviors, age of the offspring, length of residence or reasons for migration. Such research can address the question of how adolescents' active role in socialization and enculturation processes unfolds in different ethnic groups and contexts but which face similar migration conditions or challenges, and thus, can shed light on the generalizability of findings. As part of this effort, it will be important to identify and investigate the (co-)occurrence of (culture-) general and (culture-)specific aspects of adolescents' development (i.e., biological processes and processes shaped by local environments; Schwartz, Walsh, et al., 2020). Therefore, scholars also need to combine theories and methodology from developmental, cross-cultural, and acculturation research, to rely more on international collaborations in the future, and to share data, measures, and expertise (Barbot et al., 2020). For this purpose, however, more integrative and interdisciplinary research is inevitable to move toward a global and inclusive science of human development in the future. In addition to interdisciplinary approaches, scholars need to cooperate with practitioner organizations. This would also allow them to reach out to understudied groups, for instance refugees outside Europe or societies with less developed research structures or fewer financial resources, such as countries on the African continent. Research on such families could help to obtain a more complex picture of the multifaceted challenges that immigrant families face and the way in which immigrant adolescents can contribute to the successful adaptation of families or societies across the globe.

6.8 Implications for Practice: The Do's and Don'ts

The last but important intention of this dissertation was to derive practical implications that can support immigrant adolescents and their families in developing as successfully as possible in new environments. For this reason, I derived four "*Do's*" and "*Don'ts*" based on my own and recent research, which can act as guidance for practitioners. Clearly, this doctoral research has shown that family interactions in the acculturation process are highly individual. Nevertheless, suggestions can be drawn from my findings that may support many families in adapting to a new context. The following four Do's and Don'ts should be understood as one single recommendation that will best support the successful development of youths and their families when jointly applied. Since my research focused on the role of adolescent family members, this recommendation targets them as well.

DO 1: Use the Chance to Take on Responsibility in the Family and be Active (for it)!

In sum, my findings show very conclusively that the active role and adoption of tasks by adolescents in family adaptation processes are associated with a variety of positive psycho-socio-cultural outcomes for the adolescents themselves as well as for the family—regardless of the domain in which adolescents guide the family (e.g., general familial, technical, or migration-specific tasks). Adopting responsibilities can promote the competencies and skills of adolescents and can mitigate the socio-cultural adjustment difficulties of the family (Chapter 2; Chapter 4; Kam & Lazarevic, 2014a; Weisskirch, 2020). That is, adolescents can be a valuable source of support for families in challenging situations, which, however, may not necessarily be migration-specific. Integration workers, teachers, or other practitioners, who support immigrant families in a new context, should therefore encourage children and adolescents to support their parents in domains in which they can develop more and/or faster competencies - even if these do not actually correspond to their typical role in the family—and encourage parents to accept this support. Another advantage is that this source of support is easily accessible by parents, and they are potentially less reluctant to ask their offspring than involving “strangers” in personal challenges. This recommendation is intertwined with the second "DO".

DO 2: Adapt to the Host Culture and Support Your Family in This Process!

My research underscores the importance of immigrant youths adapting to host culture behaviors, values, and norms because they are the main drivers of host adaptation for the whole family (Chapter 3; Chapter 5; Shen et al., 2019). Adopting host culture behaviors and norms at least partially (e.g., host language acquisition and knowledge about school or public authorities) is important for a family’s successful adaptation to the new society. Knowing about and acquiring host culture behavior and norms have a positive impact on the academic success prospects of immigrant youths, can ease parents’ entry into the workforce, and can help to establish a new social network. Thus, by adapting to the host society, adolescents can help their families to overcome typical migration-specific challenges (Schachner et al., 2018). For this reason, practitioners, teachers, or other stakeholders, for example in asylum homes, should promote youths’ learning of the host language or typical behaviors, for instance by creating various opportunities to speak the host language, as well as pointing out the importance of immediate school or kindergarten attendance for children and adolescents. Facilitating contact between immigrants and host society individuals, for example by providing youth with financial and social support to attend sports or music clubs, may also help to ease the adaptation to the new society. However, practitioners should clarify to families that host culture adoption can occur independently of the retention of the ethnic culture. That is, the host and ethnic cultures are not

two opposing poles but two independent components that underlie the successful development of youths and their families (Berry, 1997). Having and internalizing this knowledge is important for all generations: parents may be less concerned about becoming alienated from their offspring, and youth may understand that becoming part of the "new" society does not have to mean losing family origins and traditions. From this premise, it is highly important to apply this "DO" in combination with the two "DON'Ts" that can be derived from my findings:

DON'T 1: Don't Forget Your Ethnic Culture and Maintain What is Important to You and Your Family!

My findings emphasize that it is not necessarily adolescents' active and fast adaptation to the host culture that compromises family relationships and interactions but also acculturative differences in the ethnic culture, for example, when adolescents deviate largely or completely from their family origins (Chapter 3; Chapter 5; Telzer et al., 2016). Indeed, adolescents' successful integration of the ethnic and host cultures leads to the best psycho-socio-cultural and developmental outcomes for adolescents (e.g., mental health) and can minimize the potential for family conflict (Nguyen & Benet-Martínez, 2013). Thus, in combination with "DO2", it is important to actively promote and strengthen youth biculturalism, because it can minimize potential risks of youths' (active) acculturative development (Schwartz, Unger, Baezconde-Garbanati, et al., 2015). For this reason, practitioners or teachers should encourage immigrant youths to become or remain familiar with their origins—even outside the family, for example at school. It can also be helpful to discuss with youths the versatile potential that can result from feeling confident in multiple cultures, such as the capacity to adapt quickly to new circumstances (Nguyen & Benet-Martínez, 2013). To achieve this, diversity can also be made a topic in the classroom, in sports clubs, and in other leisure facilities, for example, by exploring commonalities and differences among youth beyond ethnic group membership. Culturally responsive teaching has also increasingly been proven to be successful in this regard (Gay, 2010).

DON'T 2: Don't Lose Patience With Your Parents, who Adapt More Slowly, and Alienate Yourself From Your Family!

This dissertation highlights that fast adaptation of adolescents can overwhelm parents and lead to negative family dynamics, such as increasing conflicts. Enabling both the youths themselves and above all their parents to cope with adolescents' developmental growth is important to keep track of both generations and to respond to their needs (e.g., maintaining certain cultural rituals; Chapter 3; Chapter 5; Zhou et al., 2017). For practical purposes, this means that youths should be encouraged to integrate into the new society and to support their

families actively in doing so but that they should also be educated about acculturation as a long-term developmental process that can proceed differently for all family members. Adolescents should therefore be sensitized to the fact that adaptation in the host and ethnic cultures is highly individual and can unfold at different paces with different goals for family members (R. M. Lee et al., 2020). With this knowledge, youths might also be introduced to the challenges of (too fast) host adaptation for the family, such as family alienation. In this regard, family supervisors can be very helpful and supportive, paying attention to the adaptation of all generations and communicating their needs to prevent the family from being torn apart. They can also guide families in finding compromises that balance the needs of adolescents developing in multiple cultures with those of their parents.

7 Conclusion

The presented research expands the knowledge about adolescents' active participation in family adaptation processes and the conditions that can potentially favor its positive and negative psycho-socio-cultural outcomes for the whole family. By drawing on theory and research from developmental psychology and acculturation research, two forms of adolescents' active role in family processes were identified—direct and evocative adolescent influences—and investigated in four empirical studies that were based on parent–adolescent data of five ethnic groups in three contexts. The studies revealed that immigrant adolescents are highly engaged in their own but also in their families' socialization and enculturation processes and that adolescents' active role can promote youths' and families' psycho-social adjustment, tighten parent–child relationships, and facilitate families' adaptation to a new society. Thus, this thesis supports recent claims to move toward theories and models that emphasize adolescents' active agency in development and acculturation. In this regard, my findings suggested a strength-based perspective on adolescents' active role in the family and the need to investigate individual potentials, strengths, and resources of acculturating and developing youths. The study of diverse immigrant groups in different contexts has underpinned the importance of including the characteristics of the immigrant group and the receiving society in theory and empirical research to increase our knowledge of the unique as well as universal adaptation processes of diverse immigrant adolescents and their families in multicultural contexts. Furthermore, this research highlights the importance of combining methodological approaches and disciplines to understand processes at the intersection of adolescent and family acculturation and development and to uncover the underlying dynamics. The findings connect to and expand on previous developmental, acculturation, and cross-cultural research and offer many starting points for future research on adolescents' active role in family adaptation as well as providing implications for practice. In sum, this dissertation demonstrates that adolescents actively engage in their own and their families' developmental growth and adaptation. In doing so, they can support their families in vulnerable phases such as adapting in new environments as well as in daily life. Moreover, they can develop skills and competencies that are also necessary for solving developmental tasks and, thus, are building a foundation for their own successful development. Accordingly, they also have the potential to be a valuable and constructive source for families and future societies - a resource that should be relied on more in the future.

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Appendix

Appendix A: Eidesstattliche Erklärung

Appendix B: Erklärungen der Eigenanteile

Appendix B1: Eigenanteil Paper 1

Appendix B2: Eigenanteil Paper 2

Appendix B3: Eigenanteil Paper 3

Appendix B4: Eigenanteil Paper 4

Eidesstattliche Erklärung

Hiermit versichere ich, die Dissertation *Immigrant Adolescents' Active Role in Family Adaptation Processes: The Do's and Don'ts* selbstständig angefertigt zu haben. Die Arbeit wird zur Promotion im Fach Psychologie eingereicht und ist selbstständig ohne unzulässige Hilfe Dritter verfasst worden. Bei der Abfassung wurden nur die in der Dissertation angegebenen Hilfsmittel benutzt sowie alle wörtlich oder inhaltlich übernommenen Stellen als solche gekennzeichnet. Die Dissertation ist in der gegenwärtigen oder einer anderen Fassung nicht schon früher als Forschungsarbeit verwendet worden und in keinem früheren Promotionsverfahren angenommen oder abgelehnt worden. Ich habe an keiner anderen Hochschule ein Promotionsverfahren eröffnet.

Hannover, April 2021



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Lara Aumann

Erklärung der Promovendin
Zum eigenen Anteil an den vorgelegten wissenschaftlichen Abhandlungen
(kumulative Dissertation)

Name der Promovendin: Lara Aumann
Titel der Dissertation: Immigrant Adolescents' Active Role in Family Adaptation Processes: The Do's and Don'ts
Betreuer: Prof. Dr. Peter F. Titzmann

Wissenschaftliche Abhandlung 1

Titel	Why do Youth Support their Families? A Person-Oriented Approach in Migrant and Native Families
Autor_innen	Aumann, L. & Titzmann, P. F.
Journal	Journal of Youth and Adolescence
	Publikationsstatus (bitte ankreuzen)
<input type="checkbox"/>	Nicht eingereicht
<input type="checkbox"/>	Eingereicht
<input type="checkbox"/>	In Begutachtung
<input type="checkbox"/>	In Revision
<input type="checkbox"/>	Angenommen
<input checked="" type="checkbox"/>	Veröffentlicht / Publikationsjahr: 2020

Beschreibung des eigenen Anteils, wenn **keine** Alleinautorinnenschaft vorliegt:
 Zur Entwicklung dieses Artikels habe ich in folgender Art und Weise beigetragen:

- An der Konzeption der Studie und überordneten Fragestellung mitgewirkt
- Theoretische Einbettung der Fragestellung
- Literatursuche und -auswertung
- Konzeption der Hypothesen
- Methodische Konzeption der Fragestellung und statistische Umsetzung der Hypothesenprüfung
- Analysestrategie und Auswertung der Daten
- An der Interpretation der Daten mitgewirkt
- Erstentwurf des Artikels verfasst und an der Verfassung aller Versionen des Artikels mitgewirkt
- Abstimmung und Einarbeitung der Überarbeitungsvorschläge
- Einreichung beim Journal



Unterschrift
Lara Aumann



Unterschrift
Peter F. Titzmann

Erklärung der Promovendin
Zum eigenen Anteil an den vorgelegten wissenschaftlichen Abhandlungen
(kumulative Dissertation)

Name der Promovendin: Lara Aumann

Titel der Dissertation: Immigrant Adolescents' Active Role in Family Adaptation Processes: The Do's and Don'ts

Betreuer: Prof. Dr. Peter F. Titzmann

Wissenschaftliche Abhandlung 2

Titel	Acculturative Change: Striking a New Path to Study the Adaptation Processes of Immigrant Adolescents and their Families
Autor_innen	Aumann, L., Titzmann, P. F. & Richard, M. Lee
Journal	Developmental Psychology
	Publikationsstatus (bitte ankreuzen)
<input type="checkbox"/>	Nicht eingereicht
<input checked="" type="checkbox"/>	Eingereicht
<input type="checkbox"/>	In Begutachtung
<input type="checkbox"/>	In Revision
<input type="checkbox"/>	Angenommen
<input type="checkbox"/>	Veröffentlicht / Publikationsjahr:

Beschreibung des eigenen Anteils, wenn **keine** Alleinautorinnenschaft vorliegt:
 Zur Entwicklung dieses Artikels habe ich in folgender Art und Weise beigetragen:

- An der Konzeption der Studie und überordneten Fragestellung mitgewirkt
- Theoretische Einbettung der Fragestellung
- Literatursuche und -auswertung
- Konzeption der Hypothesen
- Methodische Konzeption der Fragestellung und statistische Umsetzung der Hypothesenprüfung
- Analysestrategie und Auswertung der Daten
- An der Interpretation der Daten mitgewirkt
- Erstentwurf des Artikels verfasst und an der Verfassung aller Versionen des Artikels mitgewirkt
- Einreichung beim Journal



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Erklärung der Promovendin
Zum eigenen Anteil an den vorgelegten wissenschaftlichen Abhandlungen
(kumulative Dissertation)

Name der Promovendin: Lara Aumann
Titel der Dissertation: Immigrant Adolescents' Active Role in Family Adaptation Processes: The Do's and Don'ts
Betreuer: Prof. Dr. Peter F. Titzmann

Wissenschaftliche Abhandlung 3

Titel	Adolescents' Technical and Culture Brokering in Immigrant and Native Families
Autor_innen	Aumann, L. & Titzmann, P. F.
Journal	Child & Family Studies
	Publikationsstatus (bitte ankreuzen)
<input type="checkbox"/>	Nicht eingereicht
<input type="checkbox"/>	Eingereicht
<input type="checkbox"/>	In Begutachtung
<input checked="" type="checkbox"/>	In Revision
<input type="checkbox"/>	Angenommen
<input type="checkbox"/>	Veröffentlicht / Publikationsjahr:

Beschreibung des eigenen Anteils, wenn **keine** Alleinautorinnenschaft vorliegt:
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- An der Konzeption der Studie und überordneten Fragestellung mitgewirkt
- Theoretische Einbettung der Fragestellung
- Literatursuche und -auswertung
- Konzeption der Hypothesen
- Methodische Konzeption der Fragestellung und statistische Umsetzung der Hypothesenprüfung
- Analysestrategie und Auswertung der Daten
- An der Interpretation der Daten mitgewirkt
- Erstentwurf des Artikels verfasst und an der Verfassung aller Versionen des Artikels mitgewirkt
- Abstimmung und Einarbeitung der Überarbeitungsvorschläge
- Einreichung beim Journal



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Wissenschaftliche Abhandlung 4

Titel	Acculturation Gaps in Diaspora Immigrant Adolescent–Mother Dyads: The Case for a Domain-, Group and Context-Specific View on Family Adaptation
Autor_innen	Aumann, L. & Titzmann, P. F.
Journal	International Journal of Psychology
	Publikationsstatus (bitte ankreuzen)
<input type="checkbox"/>	Nicht eingereicht
<input type="checkbox"/>	Eingereicht
<input type="checkbox"/>	In Begutachtung
<input type="checkbox"/>	In Revision
<input type="checkbox"/>	Angenommen
<input checked="" type="checkbox"/>	Veröffentlicht / Publikationsjahr: 2018

Beschreibung des eigenen Anteils, wenn **keine** Alleinautorinnenschaft vorliegt:
 Zur Entwicklung dieses Artikels habe ich in folgender Art und Weise beigetragen:

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- Theoretische Einbettung der Fragestellung
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- Einreichung beim Journal



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