Adaptation of Adolescents in Social Context:
Integrating Developmental, Acculturative, and Intergroup Approaches

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Abstract

This dissertation examines individual differences in the adaptation of adolescents and focuses on the case of immigrant adolescents. It proposes a guiding framework that integrates developmental, acculturative, and intergroup approaches in order to achieve a comprehensive understanding of the processes underlying adaptation. From this framework, I derive two core research questions that guide the three empirical studies of this dissertation. First, what is the longitudinal interplay of developmental tasks and acculturative tasks? Second, what is the longitudinal interplay of either of these two tasks and the quality of adolescents’ relationships with family and peers? This dissertation is based on three studies that used the same longitudinal data set of immigrant and host-national students. Study 1 showed that family functioning and involvement in host and ethnic cultures predicted immigrant adolescents’ self-efficacy and ethnic identity. Study 2 revealed that sociometric peer likability by ingroup but not outgroup classmates predicted self-esteem of both immigrants and host-nationals, which was fully mediated by their self-perceived likability. Study 3 demonstrated that sociometric peer likability by host-national but not by immigrant classmates predicted low perceptions of personal discrimination in immigrant adolescents. In summary, this dissertation successfully applied the proposed integrative framework by demonstrating that positive relationships with family and peers represented resources for adolescents’ mastery of their acculturative and developmental tasks, which in turn were intertwined. The main implication is that each of the two cultures and societal groups presents immigrant adolescents with different risks and resources that are all important aspects of their adaptation. In sum, this dissertation is an important step toward a more contextualized and integrative understanding of the adaptation of adolescents in a modern society.

Keywords: Adaptation, Immigrant adolescents, Acculturation, Developmental tasks, Social relationships
Zusammenfassung


Schlagwörter: Adaptation, jugendliche Migranten, Akkulturation, Entwicklungsaufgaben, soziale Beziehungen
Introduction

Adolescence is a unique transitional phase because it is characterized by extensive changes on different levels. In fact, it may be the period of the life span in which most of an individuals’ biological, cognitive, psychological, and social characteristics change simultaneously (Lerner & Galambos, 1998). These changes present a host of new competency requirements and challenges for adolescents. For instance, they need to manage the transition to middle-level schools, the development of self and identity, and adapt to changing relationships with peers and family (Eccles, Midgley, Wigfield, & Buchanan, 1993).

In addition to normative development, adolescents may experience another kind of change that has received less research attention: immigration. Throughout human history, adolescence has been shaped by social, cultural, and political transformations. The most pervasive change in our contemporary societies is due to globalization, an intensifying process that, now more than ever, affects the adaptation of individuals. This is particularly the case for adolescents, as they seek involvement outside their families more than children, and as they are more susceptible to new influences than adults (Arnett, 2002). One particularly salient feature of globalization is increased worldwide migration. Immigrant adolescents are faced with acculturative challenges that stem from the need to adapt to the realities of two cultures and societal groups (Berry et al., 2006). A robust finding of previous research is that adolescents, and particularly immigrant adolescents, vary considerably in how and how well they master acculturative and developmental challenges: some are resilient and resourceful in the face of stressors and risks, such as low socioeconomic status and discrimination, whereas others are maladjusted (see Masten, Liebkind, & Hernandez, 2012). However, it remains unclear how exactly this variation in adaptation comes about.

This dissertation aimed at identifying individual and contextual resource factors that drive adolescents’ successful adaptation and risk factors that impede it. The synopsis begins with an outline of the current literature on normative development of adolescents. This is followed by a discussion of the case of immigrant adolescents and a presentation of the acculturative challenges they are faced with. Based on the current state of literature, I first highlight open question and then propose a framework that integrates developmental, acculturative, and intergroup approaches from which I derive two core questions that guide the empirical studies. Next, I give a brief summary of the results from these studies. Finally, I present a general discussion of the findings in light of the current literature, derive implications for research and practice and conclude with an outlook on future research.
Normative Development in Adolescence

Ecological Perspective

The dominant way developmental scientists think about the reasons for individual differences in adaptation is in terms of an ecological perspective (Lerner, 2006; Magnusson & Stattin, 1998; Sameroff, 1983). Elaborating on Lewin (1935), who stated that all behavior must be understood in light of the context, Bronfenbrenner (Bronfenbrenner & Morris, 2006) developed the influential ecological theory. Accordingly, development is a function of transactional relations between individuals and their social contexts, which vary depending on the individual, the contexts, the culture, and over time. Each context provides specific risks and protective factors, which either impede or promote successful adaptation. The microsystem consist of proximal contexts adolescents directly and actively interact with, such as family and peers. Transformations of intimate social relationships represent the primary engines for adolescents’ development as they place them in different positions of resilience or vulnerability (Lerner, 2006). Proximal contexts are embedded in greater societal systems. In addition, all systems are assumed to change over time, which is termed the chronosystem.

Building on Thomas and Chess’ (1977) goodness-of-fit model, Eccles and colleagues (1993) developing the person-environmental fit theory, which is an outgrowth of the ecological perspective. At its core is the assumption that unsuccessful adaptation of adolescents may result from a mismatch between their developmental needs and the opportunities provided by their social contexts. Support for this perspective came from examinations that demonstrated that inappropriately designed school environments present challenges to adolescents’ adaptation (see Eccles & Roeser, 2009).

Developmental Task Theory

Identifying individual and contextual risks and resources for adolescents’ adaptation requires a close examination of the unique challenges that characterize this life phase. Developmental task theory poses that tasks specific to a certain developmental phase represent psychosocial milestones of development – a notion that is firmly anchored in life-span research (Havighurst, 1948/1972; Masten et al., 2005). The degree to which individuals master their age-salient tasks indicates their current and forecasts their future developmental success (Roisman, Masten, Coatsworth, & Tellegen, 2004). The tasks of adolescents that this dissertation focuses on can be divided into two broad domains of functioning: individual and social development (see Sroufe, Egeland, Carlson, & Collins, 2005).
Individual development. Individual development encompasses self and identity maturation. Driven by cognitive and social advances and socialization pressure, adolescents’ self-views and personality change and become increasingly differentiated (Harter, 2012; van Aken, Hutteman, & Denissen, 2011). Self-esteem, defined as a person’s overall evaluation of his or her personal value (Leary & Baumeister, 2000), undergoes substantial changes. Evidence shows that self-esteem steadily declines from late childhood to early adolescence due to increasing self-doubt and attention to others’ judgments, and it rises through late adolescence (Erol & Orth, 2011; Robins, Hendin, & Trzesniewski, 2001). Although a substantial subgroup experiences steep drops in self-esteem, many others do not (Zimmerman, Copeland, Shope, & Dielman, 1997). Recent longitudinal studies documented that low levels of self-esteem have negative effects on a number of life outcomes, such as poor health, depression, and limited economic prospects during adulthood (Orth, Robins, & Widaman, 2012; Trzesniewski et al., 2006).

In addition, adolescents need to adjust their self-efficacy, which is defined as a set of beliefs in their own capability, to produce desired effects in tasks the society wants them to succeed in (Bandura, 2006). Adolescents are expected to prepare for adult roles and to function in their social environments, including managing school transition, new academic demands, and enlarged peer networks. Self-efficacy plays a major role in managing those tasks because, as the core foundation of human agency, it enhances activity choices, effort, persistence, and emotional reactions (see Zimmerman, 2000). Correspondingly, a large body of research has reported beneficial effects of self-efficacy for a wide range of adolescent outcomes, including school achievement and social integration (see Bandura, 2006).

Another main task of adolescence is to form personal identity, defined as a sense of coherence and continuity across time and life domains (Erikson, 1968). Marcia (1980) operationalized Erikson’s views by developing the identity status model that distinguishes two identity processes: exploration (i.e., consideration of alternative identity choices) and commitment (i.e. personal involvement in an identity). Marcia distinguished four statuses based on those processes. In support of these statuses, a recent longitudinal study found relatively stable individual styles of identity formation (Meeus, Schoot, Keijsers, Branje, & Schwartz, 2010). However, in the last decades, the identity status model has been criticized for being too narrow in today’s diverse societies, which culminated in theories about specific parts of identity (e.g. Schwartz, 2005). For instance, ethnic identity, defined as a sense of belonging to one’s ethnic culture, is considered a salient part of identity in today’s societies (Phinney, 1990). An expansive body of empirical research demonstrated ethnic identity to
promote positive outcomes in adolescents (Caldwell, Zimmerman, Bernat, Sellers, & Notaro, 2002; Galliher, Jones, & Dahl, 2011) and to buffer from risks (Oyserman & Yoon, 2009).

**Social development.** Adolescence, particularly in the early phases, is characterized by profound transformations of relationships with both parents and peers (Fuligni & Eccles, 1993). Adolescents develop an increasing need for autonomy and independence that their parents are challenged to accommodate (Gutman & Eccles, 2007). This involves family negotiations of the power balance and authority, which is linked to an increase of conflict (Steinberg, 1990). At the same time, adolescents have a continuing need for relatedness and their parents remain important sources of guidance and support (Kağıtçibasi, 2005). Hence, in an optimal parent-adolescent relationship, adolescents’ need to individuate is supported within the context of close relationships (Steinberg & Morris, 2001). This is in line with the circumplex model that emphasizes the importance of a balance among cohesion (i.e., emotional bonding) and adaptation (i.e., ability to flexibly respond to changes) for preserving family functioning (Olson, Sprenkle, & Russel, 1979). The degree to which families maintain their functioning during adolescence varies and has important implications for adolescents’ development, including identity formation and self-regulation (Steinberg & Morris, 2001).

Driven by increasing individuation, adolescents gradually shift their attention from parents to peers, yielding peers core influences for their development (Harter, 2012). This is reflected in the increasing amount of time they spent with peers, which is due to school attendance and their growing desire for companionship (Richards, Crowe, Larson, & Swarr, 1998). Adolescents become highly concerned with obtaining social acceptance, more than people of other ages (Brown, 2011). Those who experience difficulties in obtaining social acceptance are at risk for internalizing and externalizing symptoms and low school performance (see Rubin, Bukowski, & Parker, 2006). Furthermore, the degree to which they are, and more importantly to which they feel accepted by peers has been identified as the most important source of their self-esteem (Greene & Way, 2005). This is consistent with sociometer theory claiming that the function of self-esteem is to monitor whether (or not) peoples’ need to be liked is fulfilled to prevent social exclusion (Leary & Baumeister, 2000).

**The Case of Immigrant Adolescents**

**The Global Immigration Phenomenon**

Current estimates show that the number of foreign-born people worldwide has reached 214 million in 2010 (i.e., 3% of the world’s population), which is 30% more than in 2000 (International Organization for Migration, 2010). The immigrant stock in Europe has
constantly increased from 55 million in the 1990s to 70 million in 2010, which constitutes 8.7% of Europe’s total population. These statistics generally ignore immigrants in the second generation. Considering the first- and second-generation together, immigrants form the fastest growing segment of youth population in Europe (American Psychological Association, 2012).

In light of these numbers, it cannot be ignored that immigration is an essential component of the economic and social life of contemporary societies. Immigration brings both opportunities and challenges. While it can significantly contribute to diversity, economic development, and population growth of the receiving societies, it also involves social challenges and the call for adequate immigration policy (Sam, 2006). Immigrants themselves may experience improvements in their personal, social, and economic situation upon migration, but they also face several acculturative challenges (Deaux, 2006). The degree to which they master these challenges has important ramifications for their adaptation as well as for the future success of receiving societies. This leads inevitably to the question of how to realize the positive potential of immigration (International Organization for Migration, 2010). Thus, there is an urgent need to achieve a better understanding of the psychological factors related to the immigration experience (American Psychological Association, 2012).

Adaptation of Immigrant Adolescents

Current conceptual frameworks claim that adaptation of immigrant adolescents needs to be judged based on success in both developmental and acculturative tasks (Motti-Stefanidi, Berry, Chryssochoou, Sam, & Phinney, 2012). Like all adolescents, immigrant adolescents face the normative developmental tasks discussed above. In addition, they face acculturative challenges due to their immigrant status and the need to adapt to at least two cultures. Two core acculturative challenges are particularly important. Each is subject of a different research tradition that both aim at understanding intercultural relations in modern societies (Ward & Leong, 2006). The first task is acculturation, which is the focus of acculturation research that arises from cross-cultural psychology. The second task is to deal with discrimination, which is a subject of intergroup research that originates from social psychology.

Acculturation. Graves (1967) introduced the concept psychological acculturation. It refers to the psychological change that occurs following continuous contact with another culture. Acculturation involves change in many aspects of peoples’ lives, including language competence, attitudes and values, food and music preferences, social relationships, and customs (Yoon, Langrehr, & Ong, 2010). Originally, acculturation was conceptualized as a unidimensional process in which individuals were expected to adopt the new culture while losing ties to their heritage culture. Today, most acculturation researchers view change as
bidimensional. The most widely used model was proposed by Berry (Berry et al., 2006), who stated that changes occur along two distinct dimensions, the maintenance of the heritage/ethnic culture and the participation in the receiving/host culture. Accordingly, it is possible to acquire the host culture independently, without necessarily losing ties to the ethnic culture. This has been supported by several studies (e.g., Ryder, Alden, & Paulhus, 2000).

The most common finding is that there exist vast individual differences in the degree to which immigrants are involved in the two cultures (Nauck, 2008). Based on how they balance maintenance and participation, Berry and colleagues have proposed four acculturation strategies (i.e., high-high, high-low, low-high, low-low; see Sam & Berry, 2010). Much research has addressed the question of which strategy is most successful. While several studies suggested that there are advantages to biculturalism (i.e., high involvement in both cultures; see Berry et al., 2006), others found beneficial effects of assimilation (i.e., high host and low ethnic involvement; e.g., Yeh, 2003). However, the fourfold methodology has received growing criticism (see Rudmin, 2003). For instance, it was shown that the strategies are ipsative with one another. Thus, researchers increasingly avoid the fourfold methodology and use the two dimensions separately instead. Evidence suggests that both maintenance and participation independently predict adaptive success (Oppdal, Røysamb, & Sam, 2004), even better than biculturalism (Vedder, van de Vijver, & Liebkind, 2006).

**Discrimination.** Intercultural contact can also result in experiences of discrimination. In fact, current policies in North American and European societies are judged to be only halfway favorable for the integration of immigrants (British Council and Migration Policy Group, 2011). Consequently, being treated unfairly or differently based on their ethno-cultural group membership is a salient feature of experiences of immigrant adolescents (Deaux, 2006). While conceptual work has traditionally taken the perspective of those who discriminate (Allport, 1954; Tajfel & Turner, 1986), more recent work highlighted the need to consider the experience of the discriminated individuals (Oyserman & Swim, 2001). Thereby, scholars distinguish between perceived discrimination against one’s ethnic group and against the person him-/herself and demonstrated a higher reported incidence of group than personal discrimination (Taylor, Ruggiero, & Louis, 1996). Previous research provided evidence that particularly perceived personal discrimination has deleterious consequences for adaptation, in terms of impaired health, antisocial behaviors, and poorer school adjustment (see Pascoe & Richman, 2009; Williams et al., 2012). Yet, not all individuals that feel personally discriminated against suffer from negative outcomes (Umana-Taylor & Updegraff, 2007). Furthermore, research has shown that individuals translate group discrimination into personal
discrimination, but they vary in the degree to which they do so (Motti-Stefanidi & Asendorpf, 2012). Yet, work on personal discrimination is scarce, particularly on antecedents. One reason is the difficulty to measure objective discrimination: perceiving discrimination is one view of reality that is intertwined with actual patterns of intergroup relations (Ward & Leong, 2006).

**Adaptation in social context.** To understand how immigrant adolescents master the acculturative challenges they are faced with, it is important to consider the relationships they share with intimate others, including family and peers (Kağıtçibasi, 2007). The family plays an important role in their adaptation, as it can promote positive outcomes and decrease negative effects of acculturative stress (Stuart, Ward, Jose, & Narayanan, 2010). The family may enculturate adolescents by transmitting their heritage culture (Oppedal et al., 2004). In addition, the family can help adolescents to succeed in the society at large (Ong, Phinney, & Dennis, 2006). During acculturation, the immigrant family is confronted with several challenges, such as intergenerational conflict and pressure on traditional roles (Ward, Fox, Wilson, Stuart, & Kus, 2010). Families who are able to maintain their functioning in the face of these challenges promote resiliency (see Masten et al., 2012). Kağıtçibasi (2007) stated that the main direction of development of families today is toward a model of emotional interdependence. Accordingly, families that allow for relatedness and autonomy simultaneously, support adolescents’ development of an autonomous-related self.

Peers also play an important role in immigrant adolescents’ acculturation. In today’s schools, students are increasingly exposed to peers from diverse ethnic backgrounds (Wong, Eccles, & Sameroff, 2003). One robust finding is friendship homophily, describing the tendency to befriend primarily with members of the own group (McPherson, Smith-Lovin, & Cook, 2001). This can be explained by a general tendency to favor ingroup over outgroup members, called ingroup favoritism (Tajfel, 1982), which has been found in several studies of ethnically mixed classrooms (e.g., Graham & Cohen, 1997). In addition, research showed that minorities were less often classified as popular than majorities (Coie, Dodge, & Coppotelli, 1982). Hence, immigrant status needs to be considered as group-defining characteristics that can result in immigrant status-based ingroup preferences (Hamm, 2000). Previous work showed that relationships with ingroup peers provide adolescents with a place of belongingness, whereas contact with outgroup peers may ease their host-cultural learning and can result in discrimination (Greene, Way, & Pahl, 2006; Strohmeier, Kärnä, & Salmivalli, 2010).
Open Questions

Over the past decades, extensive research efforts have been dedicated to a multitude of developmental challenges adolescents are faced with. The growing worldwide migration has also propelled increasing research interest in the adaptation of immigrant adolescents. One of the most common findings of both research traditions is that adolescents differ in their development and acculturation, which has motivated research focusing on the reasons for these individual variations. Nevertheless, to date, a number of central issues are still not entirely understood and require both theoretical and methodological advances.

First, more longitudinal designs are needed to gain a better understanding of adolescents’ adaptation (see Little, Card, Preacher, & McConnell, 2009; Masten et al., 2005). While longitudinal studies became increasingly more frequent in developmental research over the last decade or two, cross-cultural research still lacks longitudinal designs and adequate methodological rigor to comprehend the complex acculturation process (see Rudmin, 2010). Given that experimental manipulations are difficult to implement, longitudinal designs provide the best foundation to infer directions of influence. This would help to illuminate reciprocal relationships between individual and social factors. While most theories assume a dominant direction of effects from the context on the individual, some theories propose the opposite or mutual relationships. For instance, status-signaling theory claims that high self-esteem breeds liking by others (Zeigler-Hill, Besser, Myers, Southard, & Malkin, 2012) and family theories assume development in families to be reciprocal (Kuczynski, 2003).

Second, scholars highlight the need to integrate developmental processes in the study of acculturation, because immigrant adolescents face, like all adolescents, the challenges of their developmental period (Oppedal, 2006; Sam, 2006). However, immigration research is still dominated by a risk perspective (Smetana et al., 2006) and clear developmental theories are scarce, with few exceptions (Motti-Stefanidi et al., 2012). Research is particularly needed that finds ways to disentangle acculturation and development, which requires longitudinal designs. According to acculturation approaches (Berry et al., 2011), four developmental tasks deserve special attention, as they may become complicated by acculturation during development: ethnic identity, development of self, family relationships, and peer relations. This is in line with social psychological notions that claim that culture influences how people make sense of themselves and the world and can thus influence self-concepts and investment in relationships (Oyserman & Lee, 2008). While much research addressed acculturation effects on health outcomes, systematic research on effects on developmental tasks is lacking.

Third, scholars have bemoaned that the increasing contextualization has overlooked
how adolescents develop personally within different contexts (Smetana, Campione-Barr, & Metzger, 2006). Researchers called for designs that assess a wide range of specific relationship characteristics (Collin & Laursen, 2004). In light of the person-environmental fit theory, it would be of major interest to identify relationship characteristics that represent the best match for adolescents’ developmental needs. For instance, to extend previous research that focused on parenting styles, research on family functioning is needed in order to account for the importance of a balance of cohesion and adaptation to promote autonomous-related selves. Furthermore, there is a great need to include other informants such as peers to judge adolescents’ degree of social approval. Existing research is still dominated by self-report measures, which provide only one perspective that is potentially reactive (Baumeister, Vohs, & Funder, 2007). Peer ratings of likability in diverse environments might also help to disentangle perceived personal discrimination and actual patterns of intergroup relationships.

Fourth, another issue concerns acculturation measures. Despite the widely accepted view of acculturation as a bidimensional process, some studies still rely on unidimensional measures and many studies that used bidimensional measures often subsume them into the four strategies instead of using them independently (Rudmin, 2003). In addition, measures often still rely on single indicators of cultural change such as attitudes, instead of capturing the entire range of dimensions on which changes occur, such as languages, values, and customs (Yoon et al., 2010).

Fifth, more research on acculturation in European societies is needed, particularly concerning new destinations, such as Eastern and Southern Europe. Migration and acculturation in Europe is not the same as in the United States, which is why evidence from US-American studies cannot be easily applied to Europe (see Phalet & Kosic, 2006).

**Theoretical Integration**

This dissertation aimed at examining individual differences in the adaptation of adolescents, with a focus on immigrant adolescents. Above, multiple factors and processes underlying adolescents’ adaptation have been outlined that originate from perspectives within the three subdisciplines developmental psychology, cross-cultural psychology, and social psychology. In order to gain a comprehensive picture of the multifaceted processes underlying the adaptation of immigrant adolescents, I built on previous models (Motti-Stefanidi et al., 2012) and proposed an integrative framework. It served as a guiding framework of this dissertation and is presented in Figure 1.
To integrate developmental psychology, this dissertation took an ecological perspective in framing the experience of immigrant adolescents. The focus was on the role of family and peers, because they are the most influential contexts for both their acculturation and development. Although this dissertation did not directly account for the societal level, it was assumed that those levels affect the individual through the proximal contexts family and peers. The chronosystem was considered by investigating effects over time. A core part of the ecological view is that there exist risk and resource factors at both the individual and proximal contextual level. Consistently, I assumed that each immigrant adolescent has his or her own set of individual and contextual characteristics that may place him or her in different positions of resilience or vulnerability. I integrated ecological theory with developmental task theory to identify relevant individual and contextual characteristics. The focus was on adolescents’ age-salient tasks that may become complicated by acculturation: the individual tasks self-efficacy, self-esteem, and ethnic identity and the social tasks peer likability and family functioning.

To integrate cross-cultural psychology, this dissertation took an acculturative approach. In line with a bidimensional perspective, this dissertation accounted for the fact that immigrant adolescents are confronted with the languages, values, attitudes, and customs of both their ethnic culture and the culture of their host society. To integrate social psychology, this dissertation built on an intergroup perspective. Diverse environments consisting of
immigrants and host-nationals constitute a salient intergroup situation that can breed discrimination. To account for the experience of the individual, the focus was on perceived personal discrimination. Hence, I studied bidimensional acculturation and personal discrimination as two core acculturative challenges immigrant adolescents are faced with.

In sum, each of the three subdisciplines provides a subset of concepts that are all considered to be important for understanding the adaptation of immigrant adolescents: proximal contexts, developmental tasks, and acculturative tasks. To address the gaps in the literature outlined above, the three studies that are part of this dissertation aimed at examining the transactional processes between the three across time. Each study dealt with a different transactional process. I derived two general research questions that guided the three studies.

The first question was: what is the nature of the interplay of developmental and acculturative tasks? Based on the idea that adolescents are faced with both tasks at the same time, I explored whether the mastery of one task domain affected the mastery of the other task domain. In the guiding framework, this is illustrated by bivariate links between developmental and acculturative tasks. The focus was on the interplay of self-efficacy/ethnic identity and host/ethnic acculturation (Study 1), the interplay of host-national/immigrant likability and self-esteem (Study 2) and personal discrimination (Study 3). Given that both development and acculturation are processes, the studies examined longitudinal linkages to disentangle their temporal sequence. The second research question was: what is the nature of the interplay of the quality of relationships with family and peers (i.e., proximal contexts) and the mastery of developmental/acculturative tasks. The aim was to explore whether and how adolescents’ social developmental tasks (i.e., family functioning in Study 1, peer likability in Studies 2 and 3) are longitudinally related to both the mastery of personal developmental and acculturative tasks. In the framework, these relationships are illustrated by bivariate links between the individual and the proximal context. Table 1 presents an overview of the specific contexts and tasks that were examined in the three studies.

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Table 1. Overview of contexts and tasks examined in the three studies
Parts of the Dissertation and Summary of Findings

All three studies were based on the same longitudinal data set of the Athena Studies of Resilient Adaptation (AStRA), a large-scale 3-wave project on the adaptation of immigrant adolescents in Greece. Data were collected from 12 public mixed-ethnic high schools in Athens. Students were about 13 years old at the first wave and were reassessed one and two years later. Studies 1 and 3 were based on immigrant subsamples and Study 2 used data from both immigrant and host-national students ($N = 1,057$). In all three studies, we applied structural equation modeling. We used cross-lagged longitudinal designs to examine the temporal relationship between two variables. More information about data and analyses is presented in Chapters 2 - 4. In the following three sections, I give a brief overview of the significance of each of the three studies for the overall dissertation.

Manuscript I

Manuscript I entitled “Mastering developmental transitions in immigrant adolescents: The longitudinal interplay of family functioning, developmental, and acculturative tasks” (see Chapter 2) is in press in *Developmental Psychology*. The first aim was to examine the longitudinal interplay between immigrant adolescents’ mastery of the developmental tasks self-efficacy and ethnic identity and the acculturative tasks involvement in host and ethnic cultures. Based on cross-cultural theory, we proposed a match. We expected self-efficacy and host involvement to be related and ethnic identity and ethnic involvement to be related. The second aim was to examine the longitudinal interplay between family functioning and the mastery of the acculturative and developmental tasks.

The main findings with regards to our first aim were that mastery of acculturative tasks predicted mastery of developmental tasks and we did not find support for the reverse direction. Specifically, findings were in line with our proposed match: host involvement positively predicted subsequent levels of self-efficacy and ethnic involvement positively predicted subsequent levels of ethnic identity. Furthermore, acculturation was highly stable across waves. Concerning our second aim, we found that family functioning positively predicted subsequent levels of self-efficacy and ethnic identity, whereas it did not predict mastery of the acculturative tasks. This effect was unidirectional, as neither developmental nor acculturative tasks predicted family functioning in reverse. Furthermore, exploratory analyses showed that effects of acculturative on developmental tasks increased over time, while effects of family functioning on developmental tasks decreased over time.

In conclusion, the main contributions of Study 1 to the literature on the adaptation of
immigrant adolescents are threefold. First, as one of the first longitudinal studies on adolescents’ bidimensional acculturation, the study indicated that individual differences in acculturation were stabilized during childhood. Future studies and interventions concerning acculturation should start earlier in development when learning cultural competencies is a more salient task. Second, this integrative approach is the first to show that family functioning and involvement in both cultures help immigrant adolescents to master salient tasks of their developmental period. This suggests that the immigrant family and cultural competencies can be important resources, which challenges the idea of immigration as a risk factor. Third, the findings provide new insights into the developmental timetables of immigrant adolescents: while the role of family functioning in adolescents’ development decreased, the role of the broader cultural contexts, represented by the schools and peers, increased. In Studies 2 and 3, I therefore focused on another major context that plays an increasingly important role in the development of immigrant adolescents: their peers.

Manuscript II

Manuscript II entitled “Testing sociometer theory in a diverse real-life setting: A longitudinal study of ingroup versus outgroup likability” (see Chapter 3) has been invited for resubmission by Journal of Personality and Social Psychology. The goal was to examine the longitudinal relationship between self-esteem and peer likability in immigrant and host-national classmates. The first aim was to test predictions of two opposing theories, one proposing that likability affects self-esteem (sociometer theory) and one proposing that self-esteem affects likability (status-signaling theory). We used both self-report and sociometric procedures to measure likability, which enabled us to study whether self-perceived likability mediates the sociometer effect. The second aim was to examine differential effects of ingroup versus outgroup likability using immigrant status as a realistic intergroup phenomenon.

Concerning our first aim, findings were consistent with sociometer theory, as peer nominations of likability positively predicted subsequent levels of self-esteem and this effect was fully mediated by self-perceived likability. Findings were only partly consistent with status-signaling theory, because self-esteem positively predicted subsequent levels of self-perceived likability, but not peer-rated likability. Concerning our second aim, findings revealed that only peer likability by ingroup but not by outgroup members predicted self-perceived likability and self-esteem in both immigrant and host-national adolescents.

In conclusion, by integrating self-esteem and intergroup literature, Study 2 contributes to a better understanding of the relationship between self-esteem and likability in three ways. First, the use of a longitudinal design and both sociometric and self-perceived likability
measures represents an important extension of current self-esteem literature. We have shown that being liked by peers affected adolescents’ self-esteem across one-year intervals and that this effect was mediated by adolescents’ self-perceived likability. Although having high levels of self-esteem seemed to increase adolescents’ perceived likability, it did not enhance their peer-nominated likability. Second, findings highlight the need to consider mixed classrooms with immigrant and host-national students as intergroup situation that needs to be accounted for in order to understand adolescents’ self-esteem development. Findings suggest that the sociometer is responsive to likability by members of meaningful ingroups but not necessarily to likability by outgroup members. Third, the study bears an important and optimistic message for the immigrant issue: even if immigrant adolescents were rejected by host-national peers, their self-esteem was not at risk as long as they were liked by their immigrant peers. However, this does not imply that rejection by host-national peers cannot be in other ways psychologically damaging. In Study 3, I therefore focus on another important consequence of (low) likability by host-nationals: perceived personal discrimination.

Manuscript III

Manuscript III entitled “When do immigrant adolescents feel personally discriminated against? Longitudinal effects of peer likability” (see Chapter 4) is under review in *Child Development*. The general goal of this study was to examine the longitudinal relationship between immigrant adolescents’ sociometric likability by immigrant and host-national classmates and their perceived personal discrimination. The first aim was to examine the temporal sequence of general peer likability and personal discrimination. The second aim was to investigate potential different effects of likability by host-national and immigrant classmates. The third aim was to compare acceptance and rejection effects.

The findings with regard to our first aim were that overall classroom likability negatively predicted subsequent levels of personal discrimination, whereas perceived personal discrimination did in reverse not affect peer likability. Concerning our second aim, findings revealed that only likability by host-national peers negatively predicted subsequent levels of personal discrimination, whereas likability by immigrant peers had no effect. With regard to our third aim, being accepted by host-national peers had a positive effect and being rejected had a negative effect, but only the former was significant.

In conclusion, Study 3 contributes to the present discrimination and peer relationship literature in several ways. First, the developmentally sensitive and contextualized approach may be an important step towards a comprehensive model of personal discrimination that is sorely needed. Second, as the first longitudinal study that investigates real-life experiences of
acceptance and rejection by host-national and immigrant peers, this study highlights the importance of immigrant adolescents’ daily experiences with host-national classmates. Third, interventions aimed at reducing general perceptions of personal discriminations might ideally be carried out in school settings. To prevent immigrant adolescents from feeling personally discriminated against, such interventions should not solely aim at reducing their rejection by host-national classmates, as it may be even more important to improve their acceptance.

**General Discussion**

This dissertation examined the factors underlying individual differences in the adaptation of adolescents, with a focus on immigrant adolescents. I integrated developmental, acculturation, and intergroup approaches and used longitudinal methods in order to gain a comprehensive understanding of adaptation. To this end, I developed an integrative framework from which I derived two questions that guided the three studies. The first question concerned the interplay of developmental and acculturative tasks. Taken together, the three studies provided evidence for links between developmental and acculturative tasks. Study 1 demonstrated that high levels of acculturation in the two cultures helped mastering developmental tasks. Study 2 suggested that positive relations with host-national classmates did not affect immigrant adolescents’ self-esteem, while Study 3 indicated that they decreased feelings of personal discrimination. These findings support the notion that both acculturative and developmental challenges need to be accounted for in order to get a comprehensive picture of immigrant adolescents’ adaptation (Motti-Stefanidi et al., 2012). This dissertation has taken a new approach to achieve a true integration of both processes by examining transactions between both task domains across adolescence across time.

The second question concerned the interplay of the quality of relationships with family and peers and adolescents’ mastery of developmental and acculturative tasks. In sum, all three studies suggest that positive relationships with people in adolescents’ proximal contexts provide important resources that help them to master their individual developmental and their acculturative tasks. Study 1 showed that family functioning helped adolescents’ mastery of their individual developmental tasks, particularly early in adolescence. However, family functioning did not impact their acculturation. Studies 2 and 3 indicated that approval by classmates affected adolescents’ self-esteem and personal discrimination. Hence, these findings suggest that the family is an important context for adolescents’ development, while the peer group is an important context for both the mastery of development and acculturation. The studies revealed that the mastery of individual developmental and acculturative tasks did
not influence family functioning or sociometric peer likability. Together, the finding that family functioning and peer likability were important resources is in line with the notion that proximal contexts play an important role in both adolescents’ development and acculturation (Kağıtçıbasi, 2005). In sum, the three studies provided first empirical evidence for the proposed framework and indicated that it is a promising approach to integrate developmental, acculturation, and intergroup perspectives to study immigrant adolescents’ adaptation.

**Implications for the Adaptation of Immigrant Adolescents**

First, this dissertation underlines the notion that immigrant adolescents undergo, like all adolescents, major developmental changes at the same time as they are undergoing acculturation (Oppedal, 2006). Specifically, this dissertation highlights the need to account for immigrant adolescents’ developmental timetables, age-salient tasks, and proximal contexts that fit their developmental needs. This dissertation presents a new way to approach the difficulties in isolating acculturation from development by identifying mutual longitudinal relationships between developmental and acculturative tasks. With regard to the question whether immigrant adolescents should be viewed as “regular” or “special” adolescents, this dissertation supports integrative views (Motti-Stefanidi et al., 2012). Research and practice needs to account for both immigrant adolescents’ developmental processes, which mirror those of all adolescents, while at the same time considering their special situation, as their acculturation may impact how they resolve developmental tasks and vice versa.

Second, this dissertation provided examples that immigrant adolescents can be resilient and resourceful (Masten et al., 2012). Study 1 indicated that acculturation can be a resource for mastering development. Study 2 showed that immigrant students had similar levels of self-esteem as their host-national peers despite their lower sociometric likability. Study 3 documented that their perceived personal discrimination was more affected by acceptance than by rejection from their host-national peers, which emphasized the role of positive intergroup relationships. In sum, these findings challenge the dominating research focus on acculturative stress and the prevalent view of immigration within media and political discourse as a social problem (see Suárez-Orozco et al., 2011). Instead, the findings suggest that immigrant adolescents are equipped with potential strengths that can help them succeed. However, this should not diminish the fact that they are also faced with risks that can impair their adaptation. Nevertheless, the findings may motivate a greater focus on how to foster immigrant adolescents’ strengths, instead of solely focusing on how to prevent risks.

Third, an important extension of previous work is the differentiated approach that helped to illuminate the special situation of immigrant adolescents. Following current
approaches, acculturation was measured bidimensionally. Yet, unlike Berry and colleagues (2006), both dimensions were not combined. This proved to be very fruitful. Study 1 revealed that host involvement predicted self-efficacy, ethnic involvement predicted ethnic identity, and there were no substantial cross-relationships between the two. Hence, analysing both dimensions independently provided insights into differential relationships with developmental tasks. The fourfold typology, which comes along with a loss of information, would not have allowed for these differentiated insights. Berry and colleagues (pp. 313, 2011) stated “if cultural and psychological concepts [acculturation] are not distinguished and assessed independently, it is very difficult to obtain a clear picture of the processes and outcomes of the acculturation process”. Considering the findings, I would go one step further and state that the acculturation dimensions should also be studied independently.

In addition to the acculturation approach used in Study 1, the intergroup approach used in Studies 2 and 3 also points to benefits of distinguishing between contact with immigrants’ ethnic and the host-national group. Having assessed likability in both host-national and immigrant groups suggested that both groups play different but important roles for immigrant adolescents’ adaptation. Peer relationships with the immigrant group were sources of their self-esteem (Study 2) and peer relationships with the host-national group were sources of perceived personal discrimination (Study 3). As with acculturation, overall likability scores did not allow for these differentiated insights. Hence, research that focuses on likability of immigrant adolescents may account for the group memberships of peers.

Taken together, the distinction between the acculturation dimensions and in- and outgroup likability contributed to a more differentiated insight into the adaptation of immigrant adolescents. This was facilitated by longitudinal analyses, as differential effects only unfolded over time. This dissertation revealed that involvement in both cultures (i.e., bidimensional acculturation) and social groups (i.e., in- and outgroup likability) provides access to different risks and resources: self-efficacy, ethnic identity, self-esteem, and personal discrimination. Table 2 provides an overview of which acculturation dimension and likability by which group influenced these adaptation outcomes. Thus, instead of seeking the best acculturative style, research might benefit if it aimed at identifying the specific cultural and intergroup resources that are beneficial for different aspects of adaptation. This is in line with the claim that there exists not one best acculturation strategy that holds across all contexts (Birman, Trickett, & Buchanan, 2005). In sum, acculturation in both host and ethnic cultures and likability by both in- and outgroups presents immigrant adolescents with different risks and resources that are all important parts of their adaptation.
One of the fiercest debates related to the immigrant issue concerns the kind of interventions that are most effective. In line with previous research, findings indicate complex processes and a great diversity among individuals and groups, which suggests that there is no one-size-fits-all intervention (see Schwartz, Unger, Zamboanga, Szapocznik, 2010). Nevertheless, if supported by future research, the findings provide meaningful implications that may inform practice and policy. An ideal setting for interventions may be the school, because it is a major developmental and acculturative context. To provide opportunities for contact with both cultures and peer groups, mixed classroom compositions would be desirable. Interventions may assist immigrant adolescents with learning the characteristics in the host culture and to provide them with opportunities to maintain and strengthen ties with their ethnic culture. Yet, it is important to consider that intergroup contact bears also the risk of discrimination experiences. Thus, interventions may particularly focus on fostering positive intergroup relationships, which may be more effective than only fighting negative relationships. While efforts to have traditionally been directed at immigrant adolescents’ contact with the host culture, they may also aim at fostering peer contact with their immigrant ingroup and involvement in their ethnic cultures.

Although ideally, interventions may cover the full bandwidth of adaptation outcomes presented in Table 2, this might be difficult to implement and maybe not even necessary. The findings of this dissertation may represent a first step towards more tailored interventions focused at specific adaptation outcomes. For instance, in the case of high personal discrimination, interventions may focus on relationships with host-national peers, whereas in the case of low self-esteem, they may focus on relationships with immigrant peers. Hence, understanding the specific needs of immigrant adolescents is critical in determining appropriate interventions. It might therefore be important to help teachers’ as well as other service providers’ awareness of the social and cultural factors that impact adaptation. Schools may also need to collaborate with families, as they are another important developmental and acculturative context. They could help to ease the family’s functioning by fostering parental school involvement, which may in turn improve family communication and support.

Concerning the timing of interventions, efforts to support their acculturation may start early in
childhood, those to support family functioning may start in early adolescence, and those to support peer relationships may be implemented in early to middle adolescence. In sum, the findings suggest that context- and resource-oriented approaches that are tailored to adolescents’ developmental needs and provide opportunities for positive contact with both cultures and societal groups may eventually lead to more effective interventions

**Implications for Research on Adolescence**

Beyond the issue of immigration, this dissertation provides new insights into the adaptation of adolescents in general. First, the findings extend previous research by identifying specific relationship characteristics that affect certain aspects of adolescents’ personal development. Families that were flexible and provide emotional closeness at the same time provided resources for adolescents’ self and identity maturation (Study 1). Hence, family functioning seems to be an important resource for adolescents’ development of an autonomous-related self, which is central for adolescents, particularly in today’s societies (Kağitçibaşi, 2005). Furthermore, the sociometric procedure illuminated intergroup effects within classrooms (Studies 2 and 3). In addition, both studies revealed a greater importance of peer acceptance versus rejection, which extends previous research that often did not differentiate the two. Moreover, the sociometric data helped to disentangle perspectives of adolescents and peers. This allowed documenting that self-esteem did enhance self-perceived likability but not peer-rated likability (Study 2), which highlights the need to consider both.

Second, the use of longitudinal data offered new insights into the direction of effects between social relationships and the mastery of developmental tasks. All three studies support the ecological perspective (Bronfenbrenner & Morris, 2006) in that peers and family place adolescents in varying positions of resilience or vulnerability. The integration of ecological theory with developmental task theory proved to be fruitful, because findings indicated that positive relationships of adolescents with peers and family represented resources for the mastery of their individual development. The studies did not find reciprocal effects, as personal developmental tasks did not influence the quality of social relationships, with the exception of self-perceived peer likability. This may point to other sources of variation than adolescents’ personal development, such as partner effects for family functioning (Buist, Deković, Meeus, & van Aken, 2004; Denissen, van Aken, & Dubas, 2009) and social competence and demographic factors for peer likability (see Killen, Ruthland, & Jampol, 2011). Furthermore, the longitudinal design allowed insights into developmental timetables. Findings contribute to research on normative development of immigrant youth by showing that they, like all adolescents, strive for increasing independence (Gutman & Eccles, 2007):
the family loses significance and broader social contexts gain significance in self- and identity development. In addition, findings highlight the need to consider to the unique experiences of immigrant adolescents, as cultural competencies influence their self and identity development.

Conclusions and Future Directions

This dissertation contributes to a more comprehensive understanding of the adaptation of adolescents by using an integrative approach. The empirical studies demonstrated that positive relationships with peers and family represented important resources for the mastery of both acculturative and developmental tasks, which in turn were intertwined. Thereby, the three studies constitute a promising start towards more contextualized and individualized approaches that account for both the normative development of immigrant adolescents as well as their need to adapt to the realities of two cultures and social groups. Replications of the findings are needed in order to substantiate our implications for interventions. Furthermore, the studies may pave the way for additional investigations of the proposed framework. While this dissertation focused on the interplay between the model components proximal contexts, developmental tasks, and acculturative tasks, future research may focus on the interplay within components, including family-peers, acculturation-discrimination, and within developmental tasks. Apart from their interplay, it remains a subject for future studies to include other interaction partners, such as siblings and peers outside the school, and other developmental tasks, such as school adjustment. Future research might also include host-nationals, because acculturation is viewed as a bidirectional process. Another interesting extension would be to test the framework in other countries and with other immigrant groups to explore differences and commonalities. As this area of research moves forward, the proposed framework represents an important step toward a more comprehensive understanding of the adaptation of adolescents. In conclusion, the case of immigrant adolescents highlights the need to pay more attention to contemporary societal changes. Given today’s increasing mobility and globalization, individual development cannot be entirely understood without placing the individual in today’s changing social context.
References


Bibliography of Manuscripts

