

## Value Differentiation in Adolescence: The Role of Age and Cultural Complexity

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Living in complex social worlds, individuals encounter discordant values across life contexts, potentially resulting in different importance of values across contexts. Value differentiation is defined here as the degree to which values receive different importance depending on the context in which they are considered. Early and mid-adolescents ( $N = 3,497$ ;  $M = 11.45$  years,  $SD = 0.87$  and  $M = 16.10$  years,  $SD = 0.84$ , respectively) from 4 cultural groups (majority and former Soviet Union immigrants in Israel and Germany) rated their values in 3 contexts (family, school, and country). Value differentiation varied across individuals. Early adolescents showed lower value differentiation than mid-adolescents. Immigrant (especially first generation) adolescents, showed higher value differentiation than majority adolescents, reflecting the complex social reality they face while negotiating cultures.

In contemporary society humans live in complex social worlds, taking part in multiple social interactions and social groups (Roccas & Brewer, 2002; Stets & Burke, 2003). In each social context, a set of beliefs prevails, describing what is right and wrong in this context, the aspired behaviors as well as the condemned ones (Schwartz, 1999). Individuals are socialized to embrace this set of values, and make it their own (Hofstede, 2001; Knafo & Schwartz, 2003). But what happens when values prevailing in one life context are incompatible with the values prevalent in another context? Individuals can have a stable, trans-contextual value system, regardless of the divergent values prevalent in the different contexts. They can also internalize the discordant values and maintain them as context-specific, if incompatible, values. In this case, the individual's value system can be described as differentiated

across contexts. Such differentiation in the value system may have substantial consequences for one's sense of coherence, well-being, and authenticity in the social context.

In this article, we introduce the novel concept of *value differentiation*. We define it and discuss its theoretical basis and its operationalization. We also examine developmental as well as contextual antecedents of value differentiation. From a developmental point of view, maturation during adolescence can give rise to an increased level of value differentiation. From a contextual perspective, immigration background can result in higher value differentiation. We investigate the relations between age, immigration, and value differentiation in a large sample of early and mid-adolescents in Israel and Germany.

### *Values and Value Differentiation*

Values are concepts or beliefs, describing desirable end states and varying in importance, that

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serve as guiding principles in people's lives (Rokeach, 1973; Schwartz, 1992, 1994). Schwartz (1992) identified 10 universal values, distinguished by the motivational content they express. These values are conformity, tradition, benevolence, universalism, self-direction, stimulation, hedonism, achievement, power, and security.

The values are arranged in a circular structure, expressing the dynamic relations among them. This structure contains two bipolar dimensions, each expressing a conflict between two basic motivations. In the first dimension, openness to change contrasts with conservation; that is, the motivation to follow one's own intellectual and emotional interests in novel directions is contrasted with the motivation to preserve the prevailing social order and the certainty it provides. The second dimension contrasts self-enhancement with self-transcendence. That is, values that emphasize the pursuit of one's own relative success and dominance, sometimes at the expense of others, contrast with values that emphasize transcendence of selfish concerns and care for the welfare of others, close and distant (Schwartz, 1992, 1994).

One of the main characteristics of values is their abstractness and generality. This abstraction allows values to transcend specific situations and apply to a wide variety of contexts (Schwartz, 1992). These contexts include the multiple social roles an individual occupies, as well as social groups he or she is part of. As a result, values have been found to relate to a number of attitudes and behaviors across various life contexts (e.g., Bardi & Schwartz, 2003; Brunso, Scholderer, & Grunert, 2004; Homer & Kahle, 1988; Knafo, Daniel, & Khoury-Kassabri, 2008). For example, a man aspiring to live by the conformity value "polite" will want to behave respectfully to his parents, keep his table manners, and respond to a salesperson with courtesy.

Variations in value hierarchies exist across individuals, institutions, and cultures (Chatman, 1991; Hofstede, 2001; Schwartz, 1992, 1999). An individual who operates in multiple contexts encounters different value hierarchies in these contexts. For example, many adolescents are simultaneously students and friends. Their schools may stress achievement above all values, while some peers may devalue personal achievement as impairing the social harmony.

Values are acquired through formal and informal socialization. Families, schools, religious establishments, and other social institutions aspire to pass their values on to children and adolescents in order to equip them for life in society (Boehnke, Hadjar,

& Baier, 2007; Chatman, 1991; Halstead, 1996; Knafo & Schwartz, 2001). Laws, norms, scripts, and organizational practices impart the cultural values of a society to its members (Bardi, Calogero, & Mullen, 2008; Bourdieu, 1972; Markus & Kitayama, 1994). These values are internalized, and become a part of the individuals' value priorities (Hofstede, 2001; Rohan, 2000).

When living in a complex and varied society, disagreements among socialization agents are inevitable. Individuals can cope with these disagreements in a number of ways. They can prefer one set of values over the other, and internalize this set solely, or alternatively adopt a set of values that will integrate influences of different contexts into one coherent set of values which applies across all contexts. In both cases, one's value system is unified and coherent (LaFromboise, Coleman, & Gerton, 1993).

We focus on a third option for handling disagreements among socialization agents, which is acceptance of the incompatible values as they are, leaving them compartmentalized rather than integrated. In this case, the individual may hold divergent value priorities relevant to different life contexts. When operating in a given context, the relevant values are activated and put into use (Hong, Morris, Chiu, & Benet-Martinez, 2000; LaFromboise et al., 1993). The resulting value system can be differentiated and incongruous. Individuals taking on this strategy can see the conflicting values as different aspects of their true self, or as external aspects, forced upon them by social demands.

We define value differentiation as the level of inconsistency in value priorities across distinct life contexts. Low value differentiation is depicted by congruous, coherent importance ascribed to the same values in various life contexts. High value differentiation is depicted by incongruous, non-coherent importance levels ascribed to the same value in various life contexts. An adolescent is classified as high in value differentiation if, for example, he believes in conservative values in the family, wanting to be obedient and respectful toward his parents, while aspiring for the values of openness to change in the school context, looking for new things to learn and expressing his unique opinions about them.

While only little research has been done on value differentiation (Daniel & Knafo, 2011), advances have been made with regards to differentiation of personality *traits* across contexts. Donahue, Robins, Roberts, and John (1993) have found that individuals tend to report personality traits differently when

taking on different roles and positions in society. For example, one may be outgoing as a friend, but introverted when facing new social situations. Self-concept differentiation was found to be related to meaningful personal outcomes, such as life satisfaction and emotional stability (Donahue et al., 1993; Roberts & Donahue, 1994; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997; Wood & Roberts, 2006).

A differential importance ascribed to values in different contexts was first found by Seligman and Katz (1996), who studied the value priorities people hold when thinking of different political issues, and found changes across issues. A different line of research studied the value ascribed to different achievement tasks. Achievement values were found to differentiate between tasks in elementary school (Wigfield & Eccles, 2002). These achievement values, despite their name, are not identical to abstract values as conceptualized here and by Schwartz (1992) but deal with children's motivational approach to learning tasks. To the best of our knowledge, no study has addressed the differentiation in individuals' values as an individual differences variable.

This novel focus on value differentiation adds to the existing research on self-differentiation. Values are a core aspect of culture (Hofstede, 2001; Schwartz, 1999), and are learned by society members in the process of acculturation (Berry, 1997). Value differentiation can teach us of the consequences of living in a complex, multicultural society, characterized by variations in value emphases. It is therefore important to perform, for the first time, a study of value differentiation in a cross-cultural context.

In the current study, we investigate two potential factors that can lead an individual to internalize values in an inconsistent manner and adopt a differentiated value system. We will focus on one personal variable, adolescent's age, and one contextual variable, namely adolescents' migration background.

### *Adolescence and Value Differentiation*

Adolescence is a time of multiple changes: physical, cognitive, social, and emotional. Adolescents' thinking becomes increasingly conscious, self-directed, and self-regulating. This is achieved principally through the assembly of an advanced executive suite of capabilities (Donald, 2001). Multiple processes add to the advances in thinking, from changes in brain function and anatomy (Blakemore & Choudhury, 2006) to the development of formal operations (Piaget & Inhelder, 1969), reasoning pro-

cesses (Kuhn, 1991), and processing capacities (Birney, Halford, & Andrews, 2006; Keating, 2004). Importantly, the cognitive gains achieved during adolescence develop through interactions with the social world and the cultural settings (Keating, 2004).

With regards to adolescents' abilities to entertain divergent values, it is important to consider changes in metacognition taking place in adolescence. Metacognition is the cognition that reflects on, monitors, or regulates first-order cognition. Its development is accelerated during adolescence, giving rise to complex epistemological theories (Kuhn, 2000; Moshman, 1999).

Epistemological theories are ideas regarding the nature of knowledge and the process of knowing. They include beliefs about the level of certainty and simplicity of knowledge, as well as possible sources and justifications for knowing (Hofer & Pintrich, 1997). During childhood, children tend to see knowledge as absolute and objective, defined by external authorities. Only one truth can exist simultaneously, and uncertainty is impossible in the presence of sufficient knowledge. During early adolescence, a subjectivist approach may develop, placing the responsibility for knowledge inside the individuals, and allowing each to set the right and wrong according to individual standards. From middle adolescence on, individuals can adopt a balanced approach of contextual relativism, appreciating the significance of multiple points of view, yet leaving room for standards of evaluation that validate one point of view over the other. Like many other skills acquired during adolescence, development does not happen at a set time point. It varies substantially between individuals, and may extend into adulthood (Hofer & Pintrich, 1997; Mansfield & Clinchy, 2002; Moshman, 1999).

The development of epistemological theories is not general but domain specific. Complex theories develop first in issues that leave much room for personal opinion and others, and only later in issues that seem more factual and not leaving room for dispute. Issues of morality and values not only involve personal opinion but also seem to be set by universal, impersonal standards, and therefore develop in the midst of the process (Kuhn, Cheney, & Weinstock, 2000; Mansfield & Clinchy, 2002).

Value differentiation requires advanced epistemological theories in the domain of values. To differentiate their values across contexts, individuals should accept the notion that values are not absolute truths but can be valued differently by different social forces. Mid-adolescents, with their

higher likelihood of holding advanced epistemological theories, are more likely than early adolescents to be able to entertain the relativity of values across contexts. We therefore hypothesize that during adolescence, an increase in value differentiation is found.

### *Immigration and Value Differentiation*

We suggested that value differentiation occurs when socialization agents stress different values at the various contexts of one's life. The more disparate the values a person encounters, the more likely he or she is to develop a differentiated value system. Supporting this claim, self-concept differentiation was found related to the number of transitions between roles reported by subjects. The more roles one had, the more differentiated was her self-concept (Donahue et al., 1993). In addition, the structure of the social world was hypothesized to relate to social self-complexity. Individuals exposed to, and belonging to, multiple cultures were expected to hold a more complex view of these cultures and of their own identity (Roccas & Brewer, 2002).

The structure of the social world experienced by immigrants is more complex than the one experienced by majority group members. Although there are individual differences within each cultural group, majority group members live in a relatively homogenous cultural environment, surrounded by people who mostly belong to their own cultural group. They share characteristics such as race, religion, and socioeconomic status with their family, and usually also with their peers from the neighborhood and school (Roccas & Brewer, 2002). Consequently, important socialization agents that influence the individual's values are embedded within a relatively uniform cultural environment (Bronfenbrenner, 1986). For that reason, adolescents who are a part of a majority culture learn a relatively coherent set of cultural values across contexts of their lives.

Immigrants rarely experience a comparable level of consistency in their social world. The socialization agents they encounter are embedded within a multicultural environment, influenced by the culture of origin, as well as the majority culture (Bronfenbrenner, 1986; Szapocznik & Kurtines, 1993). The family, in many cases, is heavily influenced by the ethnic culture. The school, on the other hand, often represents the majority culture.

In the process of acculturation one should choose which parts of the new society she accepts, including customs, behavior patterns, attitudes, and

values (Berry, 1997, 2001). The process of acculturation is not consistent across contexts and is usually more evident in public domains, such as the school, than in private ones, such as the family life (Arends-Tóth & Van de Vijver, 2003; Birman, Trickett, & Vinokurov, 2002; Taylor & Lambert, 1996). Adolescent youth are expected to acculturate to a different degree to the majority cultural values at the public and private domains in life. Most immigrants, adults and adolescents, report choosing to acculturate to the majority culture using a strategy of integration. This strategy dictates a simultaneous maintenance of their culture of origin and adoption of the majority culture (Berry, 1997, 2001; Berry, Phinney, Sam, & Vedder, 2006).

When choosing an integration strategy, one learns different values from both cultures and is faced with the task of resolving the differences among the values (Coleman, 1995; LaFromboise et al., 1993; Phinney & Devich-Navarro, 1997). This task is challenging especially for those who consider the cultural values to be very different from each other, and even conflicting (Benet-Martinez & Haritatos, 2005). Because the demanding task of integrating value influences from partially incompatible cultures applies to immigrants more than to nonimmigrants, we hypothesized that immigrant adolescents show higher value differentiation levels as compared to nonimmigrants. Moreover, first-generation immigrants experience the value conflicts at first hand and are socialized first to one culture, and then to another. We therefore hypothesized that they show higher value differentiation than second-generation immigrants.

### *The Current Study*

In the current study, the level of value differentiation was measured among early and mid-adolescents. Age and immigration status were examined in order to determine their relations to value differentiation. We studied the value differentiation levels of adolescents from four cultural groups, living in Israel and Germany. The two countries are similar in having large minority groups of diaspora migrants. As a result, both countries face important questions of migration policy and acculturation, which are frequently part of the public discourse. At the same time, there are substantial differences between the countries, in the everyday realities. The variety of cultural groups described in the next paragraph enabled us to address meaningful issues regarding the processes involved in adolescents' value differentiation.



The four cultural groups included in the study are two majority, nonimmigrant groups in Israel and Germany, and two migrant groups from the former Soviet Union (FSU) to these two countries. The last two groups migrated mainly after the fall of the Iron Curtain in 1989, when migration policies in the FSU were softened (Dietz, 2000; Jasinskaja-Lathi, Liebkind, Horenczyk, & Schmitz, 2003; Titzmann, 2005). We describe each of these four groups in the following sections.

*Israel majority (nonimmigrant).* This group comprises 79.28% of the Israeli population. Most of them (94.6%), are Jewish (Israel Central Bureau of Statistics [CBS], 2008). Their parents and grandparents mostly immigrated to Israel following the foundation of the state of Israel in 1948 (Israel CBS, 2009). A part (33.07%) of the majority Israelis have been born abroad, and emigrated from diverse countries to Israel (Israel CBS, 2008). In Israel, due to the special social circumstances, including the very large percentage of immigrants in the population, people who immigrated decades ago are not publically considered as immigrants themselves (Knafo & Schwartz, 2001).

*German majority (nonimmigrant).* The German society includes a large German majority that has lived in this area for many generations. Today, 18.6% of the German population have a migration background (Federal Bureau of Statistics, 2007). However, only comparatively recently a steadily growing number of immigrants has started coming to Germany. This is why in contrast to Israel, Germany for a long time did not see itself as an immigration country. This increase in immigration numbers was not only due to a high numbers of guest workers but also due to a steadily rising number of asylum seekers and FSU immigrants of German descent, who had the opportunity to migrate to Germany after the fall of the Iron Curtain.

*FSU immigrants to Israel.* The immigrants from the FSU to Israel are repatriates, or diaspora migrants. In Israel, such immigrants are called "Olim." They are not perceived as mere newcomers, but as immigrants who come back to the land of their ancestors. Israel actively supported repatriation in numerous ways: granting immediate citizenship, social security, and material support (Jasinskaja-Lathi et al., 2003; Titzmann, 2005). Today, immigrants who migrated to Israel from the FSU since 1990 form 11.2% of the Israeli population (Israel CBS, 2006).

*FSU immigrants to Germany.* Members of this group are repatriates as well, referred to in German

as "Aussiedler." They migrated from Germany to Russia mostly during the 17th and 18th centuries. The Russian tsars attracted German farmers to move to Russia to benefit from their skill and expertise and improve the economic consolidation of the country (Schmitt-Rodermund, 1999). Germany considers these immigrants to be "fellow ethnic" and supports their repatriation by assisting them materially and socially in their adaptation (Jasinskaja-Lathi et al., 2003; Titzmann, 2005). These immigrants are usually immediately granted German citizenship. FSU immigrants to Germany form 2.5% of the German population (Federal Bureau of Statistics, 2007).

## Method

### *Procedure*

In Israel, schools were randomly sampled from the list of schools in two major urban centers, and in towns populated by a large percentage of immigrants according to the Israel CBS (2001). Schools were approached by telephone, and 10 schools agreed to participate. In Germany, all schools in the state of Bremen and adjacent regions of Lower Saxony, areas populated by large numbers of immigrants, were approached by mail and telephone.

Consent forms were sent to parents before school sessions. In each school, questionnaires were distributed by trained experimenters to all students in the appropriate age groups whose parents consented to participation. The experimenters explained the instructions of the questionnaires and answered questions. Questionnaires were translated, using back-translation procedures, by native-language speakers. Participants were given the choice between answering the questionnaire in either Russian or the majority language of the country. The questionnaires were anonymous, and participation was voluntary. The study was approved by local ethical review boards in the two countries.

### *Participants*

The study reached 4,199 adolescents from the four cultural groups. It included both early adolescents (5th and 6th graders) and mid-adolescents (10th and 11th graders). Following screening of adolescents with low levels of identification with the context studied (see next), 3,497 (83.28%) adolescents were retained. These participants saw their identity in each context as central to them, a fact that led us to infer that their values in this context

will be meaningful as well. Descriptive information about the sample, including number of participants, age, and sex distribution is presented in Table 1.

German majority adolescents were defined as those whose parents were born in Germany. Majority Israelis were defined as adolescents who were born in Israel. Some Israeli parents migrated to Israel from a variety of countries other than the FSU (27.4% of the fathers and 20.4% of the mothers). Most immigration waves to Israel from countries outside the FSU ended before the 1970s. Thus, more than 80% of these parents immigrated as children. In Israel, due to large percentage of immigrants in the population, children of parents who immigrated long ago are not considered as immigrants themselves (Knafo & Schwartz, 2001).

The immigrant adolescents were first- and second-generation immigrants. Adolescents were classified as first-generation immigrants if they were born in the FSU and migrated themselves. They were classified as second-generation immigrants if they were born in Israel or Germany to a mother or a father who emigrated from the FSU. Naturally, more mid-adolescents than early adolescents reported having migrated themselves, resulting in higher percentage of first-generation adolescents in the older age group, as well as a higher frequency of second-generation adolescents in the younger age group. The percentage of first- and second-generation immigrants, as well as time since immigration of first-generation immigrants, is presented in Table 2.

The Israeli sample was similar to the population (Israel CBS, 2007) in terms of religion: The majority sample included 99% Jews, whereas FSU immigrants included 73% Jews (85% in the general immigrant population). The German sample was also similar to the population in terms of religion. The majority sample included 61.6% Christians

(63.2% in the population), the FSU immigrants included 84.3% Christians (78.89% in the general immigrant population; Terwey & Baumann, 2009).

### Measures

*Values in contexts.* We measured the importance of values in different life contexts using the Values in Context Questionnaire (VICQ). The VICQ, described and tested in detail elsewhere (Daniel & Knafo, 2011), is an adaptation to life contexts of the Schwartz Value Survey (Schwartz, 1992). Each participant rated the importance of his or her values in a number of contexts: a family member, a student, and the country of residence (Israel or Germany). FSU immigrant adolescents also reported their values as a member of their cultural group. However, values as cultural group members were not used in this report because they were not applicable to majority adolescents. Value items were rated using a 6-point scale, ranging from *not at all important to me* to *very important to me*.

Following a pretest with a sample of early adolescents, we decided to reduce questionnaire demands by focusing on 4 of the 10 Schwartz (1992) value types. The values were chosen in order to provide a meaningful representation of Schwartz's values continuum. Hence, we selected one value to represent each of the four ends of the two dimensions described in Schwartz's Theory of Universal Values (see the Appendix). From each dimension, the values chosen were the ones hypothesized to be most relevant to the contexts assessed. The dimension comprised self-enhancement versus self-transcendence was represented by the two values of achievement and benevolence, respectively. The dimension comprised conservation versus openness to change was represented by the two values of conformity and self-direction,

Table 1  
Descriptive Statistics of the Sample

Culture	Early adolescents			Mid-adolescents		
	<i>n</i>	Age ( <i>M</i> , <i>SD</i> )	% of females	<i>n</i>	Age ( <i>M</i> , <i>SD</i> )	% of females
Germany						
Majority	954	11.05 (0.80)	50.6	486	15.98 (0.66)	47.0
FSU immigrants	358	11.69 (0.96)	52.8	259	15.96 (1.26)	52.5
Israel						
Majority	407	11.99 (0.52)	52.3	559	16.24 (0.72)	55.8
FSU immigrants	147	11.93 (0.48)	53.1	263	16.17 (0.78)	44.8

Note. FSU = former Soviet Union.

respectively. Each value, in turn, was assessed using three items, chosen on the basis of their cross-cultural stability (Schwartz & Sagiv, 1995). The value items were cognitively pretested with a small sample of early adolescents, requested to elaborate on their answers to the questionnaires. Preliminary structural analyses in all four groups (weak confirmatory multidimensional scaling; Borg & Groenen, 2005) revealed that across contexts and groups, adolescents construed their values according to Schwartz's theoretical and empirical configuration, indicating that value items were reasonably comprehended by the adolescents. See the Appendix for the dimensions, values, and sample items.

Each of the resulting 12 value items (3 items testing each of the four values) was addressed repeatedly in each different context. For example, the importance of the self-direction item of creativity was assessed in the family, school, and country of residence contexts, with the following items: "As a family member, it is important to me to be *creative*"; "As a student, it is important to me to be *creative*"; or "As an Israeli/German, it is important to me to be *creative*." All items pointing to a single context were presented in the same page, and the different contexts were presented on different pages, to minimize comparison of answers to the same value items across contexts. The order of the contexts, as well as the values within the contexts, was balanced across participants. The rated importances assigned to the three items measuring each value in one context were averaged to create a scale. The results were controlled for scale use by centering around the individual's mean answer in the context, as recommended by Schwartz (1992).

Value differentiation was conceptualized as the disparity of value importance across contexts. The more differentiated an individual's values are, the more variance is expected in his or her values across contexts. We therefore compared the rated importance of each value across the three contexts of family member, student, and national group member. We calculated the standard deviation of the values in contexts scores computed in the previous step, across the contexts, independently for the values of achievement, benevolence, self-direction, and conformity. The mean standard deviation across the four values is hereby related to as the differentiation score. Cronbach's alpha of the differentiation score based on the four values was .79.

*Identification with the context.* The adolescents were instructed to rate only the values in the contexts they felt were relevant to them. Relevance to the self was measured using the centrality to identity scale from the Identification Questionnaire by Roccas, Sagiv, Schwartz, Halevy, and Eidelson (2008). The items were adapted to the contexts used in the current investigation. Therefore, the same three items were measured four times, repeatedly, before the values questionnaire in each context. For example, the items adapted to the German context are: "Being a German is an important part of my identity," "It is important to me that I view myself as German," "It is important to me that others view me as a German." Each item was rated on a 6-point scale, ranging from 1 = *strongly disagree*, through 3 and 4 = *somewhat agree*, to 6 = *strongly agree*. Cronbach's alphas of the identification score were .70 for the family context, .79 for the student context, and .87 for the country of residence context.

Table 2  
Frequency of Immigration Generation by Country of Residence and Age Group

Culture	Immigration generation		Age group		Total	Years since immigration	
			Early adolescents	Mid-adolescents		M	SD
FSU immigrants, Germany	First	<i>n</i>	88	103	191	8.48	4.12
		%	25.0	40.6	31.5		
	Second	<i>n</i>	264	151	415		
		%	75.0	59.4	68.5		
FSU immigrants, Israel	First	<i>n</i>	43	195	238	10.43	3.09
		%	29.45	75.00	58.6		
	Second	<i>n</i>	103	65	168		
		%	70.55	25.00	41.4		

Note. FSU = former Soviet Union.

Adolescents who rated one of the contexts as not central to their identity at all (< 2 on the 1–6 agreement scale) were not included in the current report, to make sure the sample consisted of individuals who perceived the contexts as salient in their lives.

## Results

### *The Importance of Values Across Various Contexts*

Although our focus is on value differentiation, it is informative to describe the importance adolescents gave to the values across contexts. Means and standard deviations of value importance in each context are presented in Table 3. In a two-way repeated measures analysis of variance (ANOVA) (3 contexts  $\times$  4 values), the degree of importance varied significantly across values,  $F(3, 10173) = 386.42, p = .001$ , but not across contexts  $F(2, 6782) = 1.19, p = .304$ .

Most importantly, a significant interaction was found between value content and context,  $F(6, 20346) = 3,430.93, p = .001$ . Values varied in importance across the contexts in a meaningful way, replicating past results (Daniel & Knafo, 2011). For example, in the family and country contexts, benevolence values were most important. In the student context, achievement values were most important. Moreover, the analyses were further performed separately in each cultural group, and revealed an overall similar pattern. For example, in all groups, benevolence values were endorsed most in the fam-

ily context, and least in the student context. Achievement values, in contrast, were endorsed most in the student context and least in the family context.

### *Value Differentiation, Age Group, and Culture*

Values are known to be related to gender, with males and females endorsing somewhat different values. Moreover, culture moderates the effects of gender, and countries differ in the size of gender effects (Schwartz & Rubel, 2005). Therefore, a set of preliminary analyses investigated the effect of gender on value differentiation using a three-way ANOVA, 2 (age groups)  $\times$  4 (cultural groups)  $\times$  2 (genders). Results showed no main effect for gender  $F(1, 3380) = 0.01, p = .917$ , as well as no interaction between gender and age group  $F(1, 3380) = 0.11, p = .738$ , or between gender, culture, and age group  $F(3, 3380) = 2.43, p = .063$ . A significant interaction was found between gender and culture  $F(3, 3380) = 2.97, p = .030$ , although in an analysis of simple effects, no difference between the genders in value differentiation was found in any of the cultural groups, all  $ps > .05$ . Based on these results, future analyses were performed while collapsing across genders.

A family's socioeconomic status can be related to their immigration status, and this relation may account for the effects on value differentiation. In addition, the number of significant others in the household may affect value differentiation as children and adolescents may be exposed to multiple,

Table 3  
*Means and Standard Deviations of Values Across Contexts in the Different Cultural Groups*

Culture	Context	Benevolence		Achievement		Self-direction		Conformity	
		M	SD	M	SD	M	SD	M	SD
Majority, Germany	Family	3.93	0.54	3.58	0.66	3.86	0.56	4.63	0.53
	Student	3.96	0.53	3.91	0.68	3.95	0.71	4.18	0.66
	Country	3.94	0.47	3.73	0.62	3.99	0.51	4.34	0.55
FSU immigrants, Germany	Family	4.16	0.70	3.57	0.62	3.52	0.62	4.73	0.58
	Student	4.02	0.52	4.03	0.61	3.71	0.61	4.23	0.56
	Country	4.11	0.51	3.73	0.61	3.77	0.59	4.39	0.60
Majority, Israel	Family	3.97	0.49	4.02	0.48	3.73	0.54	4.28	0.46
	Student	3.91	0.51	4.28	0.50	3.94	0.53	3.87	0.52
	Country	3.86	0.52	4.11	0.50	3.89	0.54	4.14	0.51
FSU immigrants, Israel	Family	3.93	0.49	4.09	0.45	3.76	0.53	4.22	0.46
	Student	3.91	0.53	4.35	0.48	3.99	0.54	3.74	0.58
	Country	3.87	0.51	4.16	0.50	3.97	0.51	4.01	0.50

Note. FSU = former Soviet Union.



sometimes contrasting, value models. Therefore, preliminary analyses also looked at the role of parents' educational level (a variable indicative of the family's socioeconomic status), family structure (living with both parents or one of them), and adolescents' number of siblings. Value differentiation did not vary by parental education in any of the cultural groups studied. Similarly, no difference in value differentiation between adolescents according to the family structure was found in any cultural group. Finally, except for a small correlation in the German majority group,  $r = .06$ ,  $p = .038$ , no relation was found between number of siblings and value differentiation. Therefore, we did not refer to these variables in the following analyses.

Table 4 presents the means and standard deviations of the value differentiation scores in all groups. The hypotheses regarding differences in value differentiation according to age group and immigration status were tested using a two-way ANOVA, 2 (age groups)  $\times$  4 (cultural groups). No interaction was found between cultural group and age group  $F(3, 3419) = 1.53$ ,  $p = .20$ . Early adolescents ( $M = 0.83$ ,  $SD = 0.40$ ) showed lower levels of value differentiation than mid-adolescents ( $M = 0.93$ ,  $SD = 0.40$ ),  $F(1, 3419) = 49.26$ ,  $p = .001$ ,  $d = 0.24$ . Thus, our first hypothesis was supported.

Adolescents from different cultural groups showed different levels of value differentiation,  $F(3, 3419) = 14.54$ ,  $p = .001$ . In accordance with the hypothesis predicting higher value differentiation in migrant groups, the highest differentiation levels

were found among FSU immigrants to both Israel and Germany (Table 4). Planned contrasts were performed in order to test directly the differences between the cultural groups. In every country, the level of value differentiation showed by nonimmigrants was compared to the level of differentiation showed by immigrants. In Israel, majority group members indeed showed lower value differentiation than FSU immigrants,  $t(3487) = 2.53$ ,  $p = .011$ ,  $d = 0.15$ . In Germany, too, majority group members showed lower value differentiation than immigrants  $t(3487) = 2.18$ ,  $p = .029$ ,  $d = 0.11$ . In sum, although effect sizes were moderate, our second hypothesis, that migrant adolescents would show increased value differentiation, was supported in both countries.

#### Value Differentiation and Immigration Generation

In order to understand the nature of relations between migration and value differentiation, we compared first-generation to second-generation immigrants. A three-way ANOVA, 2 (countries)  $\times$  2 (generations)  $\times$  2 (age groups) tested this relation. Table 5 presents the means and standard deviations of value differentiation of first- and second-generation FSU immigrants.

Country of residence had a main effect on value differentiation level. FSU immigrants to Germany ( $M = 0.93$ ,  $SD = 0.36$ ) showed higher levels of differentiation than FSU immigrants to Israel ( $M = 0.88$ ,  $SD = 0.44$ ),  $F(1, 1002) = 7.45$ ,  $p = .006$ ,  $d = 0.13$ . Replicating the former analyses, a main effect was found for age group (early adolescents:  $M = 0.86$ ,  $SD = 0.36$ , mid-adolescents:  $M = 0.96$ ,  $SD = 0.42$ ),  $F(1, 1002) = 13.65$ ,  $p = .001$ ,  $d = 0.25$ . No interaction was found between country and age group  $F(1, 1002) = 0.57$ ,  $p = .45$ .

Most importantly, immigration generation had a significant main effect on differentiation level,  $F(1, 1002) = 5.85$ ,  $p = .016$ . Second-generation immigrants showed lower differentiation levels than first-generation immigrants. The effect was similar in direction in both countries and age groups, and although the difference was stronger in Israel,  $d = 0.38$ , than in Germany,  $d = 0.08$ , no interaction was found between immigration generation and country  $F(1, 1002) = 3.01$ ,  $p = .08$ . The interactions between immigration generation and age group,  $F(1, 1002) = 0.01$ ,  $p = .92$ , as well as the three-way interaction, were not significant,  $F(1, 1002) = 1.35$ ,  $p = .26$ . In sum, first-generation immigrant adolescents show higher value differentiation than their second-generation counterparts.

Table 4  
Means and Standard Deviations of Value Differentiation by Age Group and Cultural Group

Culture		Age group		Total
		Early adolescents	Mid-adolescents	
Germany	Majority	M	0.85	0.88
		SD	0.40	0.38
	FSU immigrants	M	0.89	0.93
		SD	0.33	0.36
Israel	Majority	M	0.74	0.82
		SD	0.45	0.44
	FSU immigrants	M	0.77	0.88
		SD	0.40	0.44
Total	M	0.83	0.87	
	SD	0.40	0.40	

Note. FSU = former Soviet Union.

Table 5  
Means and Standard Deviations of Value Differentiation by Cultural Group, Age Group, and Immigration Generation

Culture	Immigration generation		Age group		Total
			Early adolescents	Mid-adolescents	
FSU immigrants, Germany	First	<i>M</i>	0.89	1.01	0.95
		<i>SD</i>	0.36	0.50	0.44
	Second	<i>M</i>	0.90	0.95	0.92
		<i>SD</i>	0.32	0.29	0.31
FSU immigrants, Israel	First	<i>M</i>	0.87	0.97	0.95
		<i>SD</i>	0.41	0.46	0.45
	Second	<i>M</i>	0.72	0.88	0.78
		<i>SD</i>	0.40	0.40	0.41

Note. FSU = former Soviet Union.

## Discussion

### *Age and Value Differentiation*

In this first study of adolescents' value differentiation, we studied the values of early and mid-adolescents from four cultural groups. In confirmation of our hypothesis, mid-adolescents showed more value differentiation than early adolescents. As has been reported earlier for self-concept differentiation (Harter, 1999), adolescence seems to be an important period for the emergence of value differentiation. This difference found between age groups was similar in Israel and in Germany, thus supporting the confidence in the conclusions.

The current study concentrated on early to mid-adolescence. As cognitive abilities such as epistemological theories, necessary for value differentiation, increase from late childhood to adolescence (Hofer & Pintrich, 1997; Keating, 2004), we would expect young children's value systems to be less differentiated than those of adolescents. Epistemological theories develop all through adolescence and into adulthood (Hofer & Pintrich, 1997; Keating, 2004; Mansfield & Clinchy, 2002; Moshman, 1999), increasingly allowing adolescents to accept conflicting views regarding values. Moreover, the engagement in multiple life contexts increases, as adolescents join social institutions such as youth clubs and workplaces (Harter, 1999). These developmental changes can enable values to get differentiated across contexts. Thus, it will be important to study value differentiation in both younger and older ages. We would also expect value differentiation to further increase into young adulthood, and stabilize when individuals reach a complex level of epistemological theorizing.

Adolescence is a time of identity formation. During this period, adolescents explore multiple values, in order to eventually commit to values that fit their individual identity (Erikson, 1968; Marcia, 1966; Schwartz, 2001). The relations between increases in value differentiation and identity exploration and commitment processes should be further studied.

### *The Immigration Experience and Value Differentiation*

Immigration was related to higher levels of value differentiation in both Israel and Germany. Adolescents from the immigrant groups showed higher levels of value differentiation than nonimmigrant adolescents. Immigrants are exposed to a complex social world, in which multiple values are considered important (Bronfenbrenner, 1986; Szapocznik & Kurtines, 1993). The current results suggest that immigrant adolescents internalize this array of values into a similarly complex value system. Such process can have meaningful implications for immigrant adolescents' adjustment, such as integration in majority social networks and social institutions like schools (Mok, Morris, Benet-Martinez, & Karakitapoglu-Aygun, 2007), and psychological adjustment (Ward, 2008).

In a more general note, the higher value differentiation among immigrants than among nonimmigrants, may indicate that the more complex the social system one is exposed to, the more differentiated one's value system will be. Similar processes may take place in other cases in which social contexts send competing value messages, such as life in a bicultural family, with each parent coming from a different culture, or marriage to a spouse from another culture. Holding many social roles

may have a similar effect. For example, an individual who is at the same time a son, husband, father, employee, friend, and athlete may hold a more differentiated value system than an individual who is solely a son, an employee, and a friend. This possibility should be addressed in future research.

The effect of immigration on value differentiation was especially apparent for first-generation immigrants. First-generation immigrants experienced immigration at first hand. They were uprooted from the physical and cultural environment in which they were born, and settled into a new environment. Second-generation immigrants were born into an immigrant family, influenced by both their original and their new cultural surroundings. The public environment they live in is usually influenced by the new majority culture. The differences between first- and second-generation immigrants suggest that the actual experience of immigration was more related to value differentiation than simply belonging to an immigrant family.

Although no significant interaction between migration generation and country was found, the effect size found for the relation between value differentiation and immigration generation appeared to be stronger in Israel than in Germany. The data show no difference between the levels of value differentiation among first-generation immigrants in both countries. At the same time, second-generation immigrants in Israel tend to display less value differentiation than their German counterparts. Living in an immigration country, many Israelis consider second-generation Jewish immigrants as not immigrants at all (Knafo & Schwartz, 2001). The Israeli culture was found to pressure Jewish immigrants from the FSU to assimilate into the majority culture, more than the German culture (Jasinskaja-Lathi et al., 2003; Shamai & Ilatov, 2001). These pressures, as well as the high social legitimacy given to immigrants becoming part of the society, may reduce the tendency for value differentiation among second-generation immigrants, possibly because they have lesser regard for the Russian identity than first-generation immigrants.

We treated immigration as an antecedent of value differentiation. The causal link between the variables is strengthened by the fact that the first-generation immigrant adolescents in the sample migrated as children, following a choice made by their parents. The immigration decision was probably not influenced by their personal characteristics, including their value differentiation. This is even more so for second-generation immigrants. Moreover, based on the above finding that value

differentiation develops during adolescence, one can conclude that immigration preceded the development of value differentiation. Immigration probably created value differentiation, and not vice versa.

#### *Strengths, Limitations, and Future Directions*

The study has several major methodological strengths. First, we sampled schools randomly in Israel, and approached all schools in set districts of Germany. Although school sampling was constrained by principals' agreement for participation, we obtained quality samples with little sampling bias, reflecting the demographic characteristics of the study population. Second, we reached large numbers of adolescents, which allowed us to detect relatively modest effects and draw conclusions with high confidence. Third, we sampled adolescents from both majority and immigration backgrounds, living in two countries, which enriches our understanding of cultural effects.

The study employed questionnaires of values. Self-report measures, although vulnerable to social desirability and self-presentation issues, are an invaluable tool for values research. Individuals' values are a subjective personal characteristic, and (in contrast with behaviors) cannot be measured by external means. Moreover, social desirability has been shown not to be a bias influencing the report of values, but a personality trait that is meaningfully related to value importance (Schwartz, Verkasalo, Antonovsky, & Sagiv, 1997). Although the report of values in contexts could be subject to consistency bias, our research with other samples (Daniel & Knafo, 2011) has shown that adolescents' and youth's reports of values in contexts obtained in a between-subjects design were similar to those obtained in a within-subjects design as the one used in the current study. (In the between-subjects design, the consistency bias was not relevant as participants reported their values in a single, randomly assigned context.) Moreover, the value differentiation score is not transparent, and is deduced based on a large body of data supplied by each participant. Value differentiation can be considered not as a self-reported variable, but as a calculated one.

The current study concentrated on three contexts relevant to adolescents' lives. The study of values in additional contexts in future research (e.g., in religious communities or among friends) will allow an examination of the generalizability of the findings to other contexts. In this study we focused

on four values, of Schwartz's (1992) 10 values. The choice of the values was deliberate, representing each of Schwartz's four higher order value dimensions, and concentrating on values with particular relevance to adolescents' lives. However, an important task for future research is to study value differentiation with additional values. We plan to address this gap in future studies.

The questionnaires were completed in classrooms, as part of a school day. This procedure makes the school context highly salient, and can influence the reported importance assigned to the values. Different value ratings may be found when reporting values while physically staying at different contexts. However, disparities that were found between values across contexts cannot result from this priming procedure, as all contexts were rated sequentially, and were influenced by the same external factors. Therefore, different physical contexts are not expected to change the results regarding value differentiation.

The increase with age of value differentiation was attributed to the acquisition of more complex epistemological theories. However, these theories were not measured directly. Moreover, past research found that although the development of complex epistemological theories started during early adolescence, it varied substantially across individuals and ages (Mansfield & Clinchy, 2002). A direct examination of cognitive development and its relation to value differentiation will strengthen our understanding of the phenomenon greatly.

Value differentiation is studied in the current article with a focus on immigration and maturation as potential antecedents. However, future studies should look into the consequences of value differentiation, and the way it can influence individual's lives. We briefly discuss three possible consequences of value differentiation. The study of these consequences can emphasize the importance of value differentiation for the experience of life in a complex reality.

First, value differentiation is the measured distance in value importance in different contexts. A gap may exist between the measured distance, and the subjectively experienced distance, as well as the feeling of conflict between values in different contexts in life. Harter (1999) found different trajectories for experienced difference and experienced conflicts during adolescence. The Bicultural Identity Integration scale (Benet-Martinez & Haritatos, 2005) is especially suitable to tap the concept of subjective distance and conflict between roles and cultures.

Future studies can look into the relations between these concepts.

Second, we suggest that value differentiation will relate to well-being. Self-concept differentiation was found to be related negatively to well-being among adults (Donahue et al., 1993). Some indications exist that a similar consequence may be found among adolescents (Harter, 1999). Using the same sample, value differentiation was found to be negatively related to well-being among adolescents (Daniel, Boehnke, & Knafo, 2011).

Third, value differentiation can be related to acculturation strategies (e.g., Berry, 1997), and specifically, to the choice of an integration strategy. Different mechanisms of integrating identities were suggested, such as alternating, blending, and creating a multicultural identity (LaFromboise et al., 1993; Phinney & Devich-Navarro, 1997). The use of these mechanisms can be examined by looking into the reported degree of distance between values across contexts. For example, the mechanism of alternating identities involves switching between identities across cultural contexts. This mechanism may involve a high degree of value differentiation because it allows for very separate identities. In contrast, the strategy of blending identities strives for reaching a unified identity which similarly applies across cultural contexts. This strategy therefore necessitates the development of a low-differentiation value system.

### *Concluding Remarks*

Living in complex cultural worlds, adolescents are exposed to multiple values. As adolescents mature, the internalization of discordant values results in value differentiation. This differentiation process occurs more strongly for immigrant adolescents, especially those who migrated themselves and who have experienced major cultural changes. The enhanced understanding of value differentiation opens a window into the intricate worlds of adolescents in general, and immigrant adolescents specifically. It calls for future research to continue exploring the development of values in complex societies.

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### Appendix: Dimensions, Values, and Items in the Values in Contexts Questionnaire

Dimension	Value	Definition	Value items	Sample item
Self-transcendence versus self-enhancement	Benevolence (self-transcendence)	Caring for the welfare of the others who are closely related to oneself	Honest, helpful, and forgiving	As a family member, it is important to me to be honest
	Achievement (self-enhancement)	Acquiring personal success through demonstrating competence according to social standards	Capable, ambitious, and successful	As a family member, it is important to me to be capable
Openness to change versus conservation	Self-direction (openness to change)	The need for independent thought and action	Curious, creative, and freedom	As a family member, it is important to me to have freedom
	Conformity (conservation)	Limiting actions and urges that might violate social expectations and norms	Obedient, polite, and self-discipline	As a family member, it is important to me to have self-discipline