Chapter 6
The Effect of Contemporaries: Siblings and Peers

This chapter builds on two observations of wide agreement: that the majority of contemporary children grow up with siblings and that, as children enter school, time spent with peers gradually increases and so does their influence. Obviously then in wishing to understand the effect of the social environment on adolescents' future orientation siblings and peers must be included and their influence relative to each other and to parents must be tested.

Consequently, the chapter is guided by three main questions. The first focuses on the effect of sibling and peer relationships and asks whether each adds to the effect of parents on adolescents' future orientation. The second question concerns the effect of sibling and peer relationship in the context of the other, specifically asking whether each adds to the influence of the other on adolescents' future orientation or alternatively substitutes for it. However, a recent cross-cultural study on of the effect of interpersonal relationships on self-esteem and perceived social support (Seginer, Shoyer, Hossessi; & Tannous, 2007) highlights the cultural relevance of this issue. The study shows that the relative effect of sibling and peer relationship varies across cultures so that the self esteem and social support of adolescents growing up in traditional societies (Israeli Arab and Druze in this case) are affected by sibling more than by peer relationship whereas the self esteem and social support of western (Israeli Jewish) adolescents are affected more by peer than by sibling relationship.

The third question relates to the *joint* effect of parenting, sibling and peer relationships. At issue is whether by sharing similar experiences and facing comparable problems, siblings and peers have greater influence than parents on adolescents' future orientation, or conversely that in spite of developmental changes in adolescents' interpersonal relationships and reduced time spent with parents (Larson et al., 1996), parents remain the most significant figures in adolescents' lives (Collins & Laursen, 2004) and thus relationship with them continue to influence adolescents' future orientation.

Although this chapter focuses on the effect of interpersonal relationships, two other channels through which siblings and peers affect adolescents' future orientation are pertinent: *beliefs* held by them, and direct adolescent-siblings and face-to-face peer interaction. Before setting out to examine how they affect future orientation the significance of sibling and peer relationships to adolescent development is reviewed.

Adolescent Sibling Relationship

Although the majority of children and adolescents grow up with siblings, early and middle childhood children spend more time with siblings than with parents (McHale & Crouter, 1996), and relations with siblings last longer than with parents (Lamb & Sutton-Smith, 1982), until 1990 research on sibling relationship has been sparse (Dunn, 2005) particularly relative to research on parent-adolescent relationship (Collins & Laursen, 2004). Underlying it are several reasons.

One is early human development theories that viewed childhood as a socialization opportunity aimed at training youths to be well-socialized adults and parents as the adults in charge of this training (Maccoby, 1994). A second draws on findings indicating adolescents' tendency to spend more time with peers (Larsen et al., 1996). Finally, a methodological consideration pertaining to the multivariate nature of family composition is also relevant here. Children may grow up in small, middle size or large families, in an all-girl, all-boy or mixed gender constellation, be firstborn or youngest, and belong to intact, single-parent or step-parent families. Nonetheless, research that has been carried out focused on two main issues: sibling interaction and the quality of their relationship in the context of age differences, parent-child relationship, and parents' differential treatment.

Sibling interaction. From early age on, sibling relationship is characterized by *complimentarity* (Dunn, 1983) emanating from older siblings' greater competence, power and status. However, although complimentarity remains stable throughout adolescence, its specific nature varies with age and gender. Thus, in early and middle childhood, older siblings and particularly older sisters serve as caretakers and teachers of their younger siblings (e.g., Azmitia & Hesser, 1993; Lamb, 1978); as they reach adolescence, caretaking and teaching are substituted by provision of information and advice about present tasks (Seginer, 1992b, 1998a) and future plans (Tucker, Barber, & Eccles, 1997).

The quality of sibling relationship. Research on the quality of sibling relationship ranging from positive (warmth, support, admiration) to negative (rivalry, jealousy, negative affect) focuses on two main issues: the factors affecting sibling relationship quality and its behavioral and developmental outcomes. Not surprising, positive sibling relationship is associated with positive developmental outcomes particularly reflected in competent peer relationship (Brody, 1998; Yeh & Lempers, 2004) and extreme negative sibling relationship is associated with negative peer relations (Bank, Patterson, & Reid, 1996).

Although some studies indicate the effect of early friendship (Kramer & Kowal, 2005) and peer relationship (Yeh & Lempers, 2004) on adolescent sibling relationship, much of the research has focused on the effect of parent-child relationship (parenting), as described below.

The effect of parenting on sibling relationship. These studies focus on two questions: how parents' differential treatment and parent-child relationship affect sibling relationship?

The overall conclusion has been that differential treatment (i.e., perceiving parents as being warmer or less demanding toward one's siblings) leads to poor sibling

relations only when considered unfair (Kowal & Kramer, 1997) and that in child-hood (Brody & Stoneman, 1995; Dunn, 1992) and adolescence (Seginer, 1998a) sib-ling relationship are similar to parent-adolescent relationship. Explanation (Brody, 1998) for these findings (as well as for findings on peer relationship reported below) comes from three psychological approaches: attachment theory (Bowlby, 1973) con-tending that children reconstruct parent-child relationship in other close relation-ships (Sroufe & Fleener, 1986), social learning theory (Bandura, 1977) positing that parent-child relationship serves as a model for other interpersonal relationships, and personality theory proposing that personality characteristics such as child's temperament (Brody, Stoneman, & Burke, 1987) similarly affect all interpersonal relationships.

However, under specific stressful conditions – not always identified in commu-nity samples (Seginer, 1998a) – siblings and especially older siblings may *compen-sate* for relational deficits with others. Such relational deficits may evolve under stressful life events and family relationships (Bank & Kahn, 1982; Bryant, 1992; Dunn, Slomkowski, & Beardsall, 1994; Gass, Jenkins, & Dunn, 2007; Jenkins, 1992), parental stress (Cummings & Smith, 1993), cultural transitions as the case is among Israeli Arabs (Seginer, 1992b), and children's social isolation (East & Rook, 1992).

Overall, as research on sibling relationship has developed, its complex nature, the relevance of parenting, and the processes that moderate and mediate its effect on adolescent outcomes become clearer. As noted in the next section, these issues are particularly relevant to our understanding of the effect of sibling relationship on future orientation.

The Effect of Sibling Relationship on Adolescents' Future Orientation

Given that sibling relationship is one of several family subsystems and that parent-adolescent relationship is relevant to future orientation, two questions are pertinent here: whether the model describing the effect of sibling relationship resembles the model describing the effect of parent-adolescent relationship on future orientation, and whether in a model including both adolescent-parent and adolescent-sibling relationship, sibling relationship affects adolescents' future orientation above and beyond the effect of parent-adolescent relationship (Fig. 6.1)? Two issues should be underscored here. First, following the rationale presented in Chap. 5, the effect
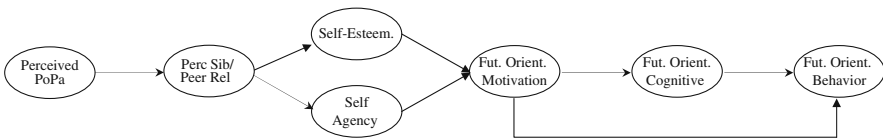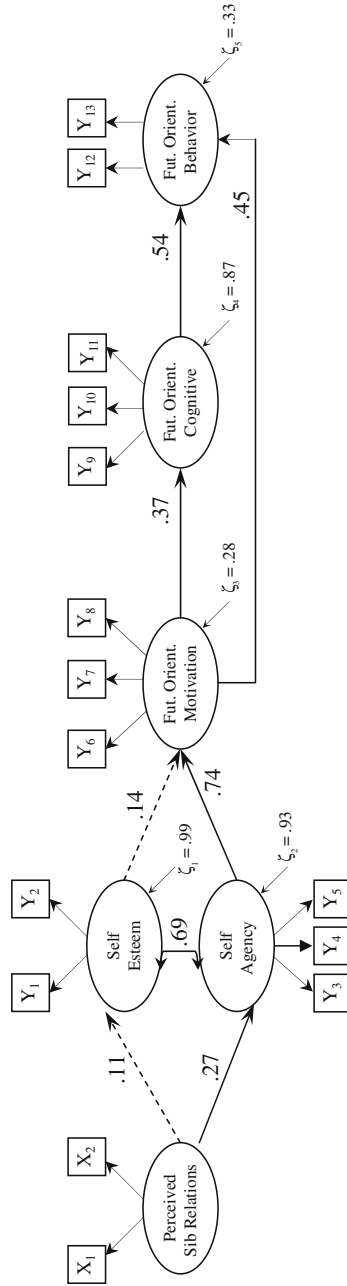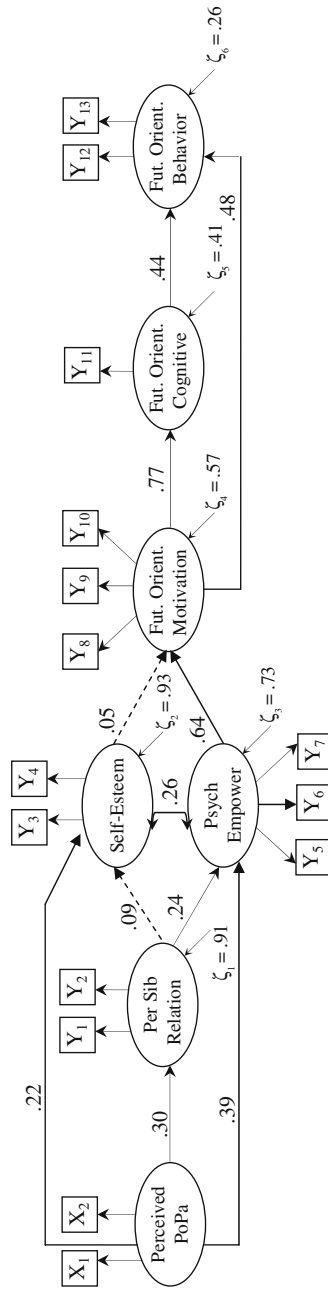

Fig. 6.1 The interpersonal relationships future orientation model

Fig. 6.2 Empirical estimate for a model of perceived sibling relationship, self and work and career future orientation: Jewish adolescents. X_1 = perceived sibling relationship/support; X_2 = perceived sibling relationship/future related; Y_1 = self esteem/ positive; Y_2 = self esteem/ negative; Y_3 = self agency/independence; Y_4 = self agency/self reliance; Y_5 = self agency/self assurance; Y_6 = value; Y_7 = expectance; Y_8 = internal control; Y_9 = my future occupation; Y_{10} = my future professional career; Y_{11} = my future workplace; Y_{12} = exploration; Y_{13} = commitment. Factors loadings (lambdas) from .36 to .94; N = 358; χ^2 (82) = 232.21; p <.001; RMSEA = .07; CFI = .92

Fig. 6.3 Empirical estimate for a model of perceived positive parenting (PoPa), perceived sibling relationship, self and higher education future orientation: Arab adolescent girls. X_1 = perceived positive parenting/acceptance; X_2 = perceived positive parenting/granted autonomy; Y_1 = perceived sibling relationship/positive; Y_2 = perceived sibling relationship/future related; Y_3 = self esteem/positive; Y_4 = self esteem/ negative; Y_5 = psychological empower/intrapersonal; Y_6 = psychological empower/behavioral; Y_7 = psychological empower/interpersonal; Y_8 = value; Y_9 = expectance; Y_{10} = internal control; Y_{11} = my future education; Y_{12} = exploration; Y_{13} = commitment. Factors loadings (lambdas) from .37 to .98; N = 585; χ^2 (68) = 203.43; p < .001; RMSEA = .06; CFI = .96

of all interpersonal relationships (i.e., parent-adolescent, sibling and peer relationships) are conceptualized and assessed as experienced and perceived by adolescents. Second, although the two subsystems are interrelated, in the model examined in our research perceived parenting precedes perceived sibling relationship and directly affects it.

Empirical estimates of the effect of sibling relationship. Our analysis (Fig. 6.2) shows that the effect of perceived sibling relationship – like the effect of perceived parenting on future orientation – is indirect and linked via the self. Moreover, the indirect effect of sibling relationship on future orientation is not an artifact of family atmosphere but rather has an added net effect (Fig. 6.3). Thus, as in the case of academic achievement (Seginer & Golan, 2007) "the rich get richer" and adolescents experiencing positive parenting also enjoy positive sibling relationship that in turn have a positive effect on future orientation.

However, while perceived parenting is linked to future orientation via both self esteem and self agency, sibling relationship is linked only via self agency, attesting to the broader effect parenting – relative to sibling relationship – has on adolescents' self and to the different self paths through which family relationships affect future orientation.

Adolescent Peer Relations

Siblings and peer relationships differ on two main dimensions: choice (Kandel, 1978, 1986) and permanence. The short-lived nature of peer relationship (Brown, 2004) has been a major reason why our research on peer relationship (Seginer, 1998a; Seginer, Shoyer, Hossessi; & Tannous, 2007) has focused on the quality of peer relations rather than on the number of close friends, sociometric nominations or peer characteristics. Moreover, peer selection is limited by geographical, socio-economic, educational and personal interests factors, and relationships within the peer group vary.

Like parents and siblings, peers may serve two main functions: as a source of warmth and support and as offering socialization opportunities. Particularly, peers may provide necessary information (Stanton-Salazar & Dornbusch, 1995; Stanton-Salazar & Spina, 2000), prompt the development of cognitive skills (Azmitia, 1988; Azmitia, Montgomery, & Cruz, 1993; Rogoff, 1990) and ideas, help children and adolescents to evaluate one's attitudes and beliefs (Piaget, 1926, 1932), and sharpen their social understanding and social skills (Hartup, 1992, 1996).

Parenting and peer relationship. The relations found between parenting and sibling relationship have also been found for peer relationship: positive parenting prompts positive peer relationship among children (Clark & Ladd, 2000) and adolescents (Cooper & Cooper, 1992; Engels, Dekovic, & Meeus, 2002), and negative parenting (indicated by parental neglect, anger, harsh discipline, or excluding children from pertinent decisions) results in associating with peers engaged in antisocial behavior (Dekovic & Meeus, 1997) and noncompliant behavior, aggression toward peers, and school misconduct (externalizing behavior).

Moreover, depending on their nature, peer groups may either exacerbate (Goldstein, Davis-Kean, & Eccles, 2005; Kim, Hetherington, & Reiss, 1999; Lansford, Criss, Pettit, Dodge, & Bates, 2003) or reduce (Lansford, Criss, Pettit, Dodge, & Bates, 2003) the negative effect of negative parenting. As indicated by a study reporting on similar effects among Chinese children (Chen, Chang, He, & Liu, 2005), the power of peer groups to curb the influence of negative parenting on young adolescents' adjustment is also found in non-western settings.

Peer relationship in cultural context. Underlying the cultural question are two issues: familism and parental knowledge. Given that familistic orientations are more prevalent in non-western societies, one obvious prediction has been that in these societies parents will have stronger effect and peers will have a weaker effect on adolescents' behavior, attitudes and beliefs than in western societies. As mentioned earlier, this prediction has been supported by recent analyses of the effect of parenting, sibling, and peer relations on the self-esteem and perceived social support of Israeli Arab, Druze (non-western) and Jewish adolescents (Seginer, Shoyer, Hossessi; & Tannous, 2007). Drawing on these findings it is expected that among Arab adolescents the effect of peers on future orientation will be weaker than among Jewish adolescents.

However, in non-western societies *undergoing social change*, adolescents view their parents as representing the world of yesterday rather than the world of tomorrow to which adolescents aspire and their knowledge of relevant issues as undated. Consequently, advice given by contemporaries may be of greater value than advice given by parents. This, as shown by earlier findings (Seginer, 1992b; Seginer & Mahajna, 2003, 2004), is particularly applicable to Israeli Arab girls growing up in traditional Moslem families where parents push their daughters to early marriage and girls aspire for higher education as means for greater personal emancipation. Lacking parental support they may turn to friends who share similar parental pressure and undergo the same generational conflict. Consequently, familism notwithstanding, non-western peers may have a stronger effect than western peers on adolescents' future orientation. The extent to which parents and peers affect the future orientation of Israeli Arab (non-western) and Jewish (western) adolescents is presented below.

The Effect of Peer Relationship on Adolescent Future Orientation

Peer relationship and future orientation. Assuming siblings and peers have a parallel socializing role, the *self mediating model* constructed for the effect of sibling relationship on adolescent future orientation is repeated for peer relationship. The comparability of the two models is demonstrated in the empirical estimate of the peer relationship model (Fig. 6.4). However, while the indirect sibling relationship-motivational component path is linked only via self-agency, peer relationship – like parenting – is linked via both self esteem and self-agency.
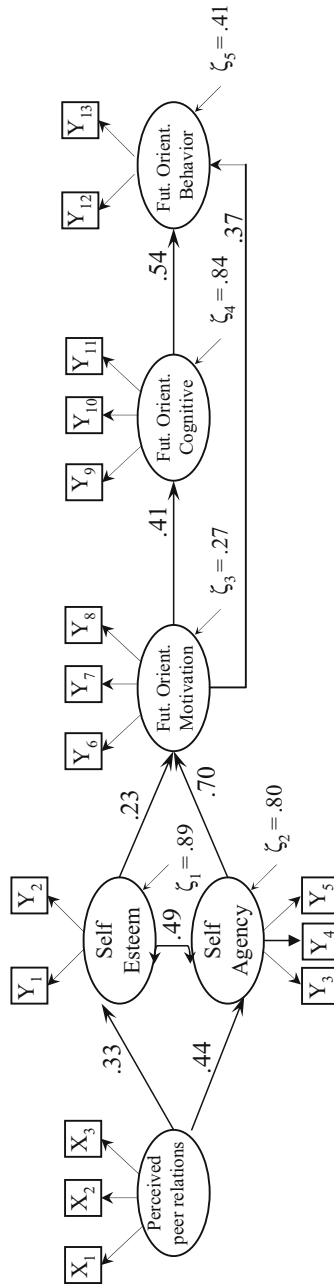
Fig. 6.4 Empirical estimate for a model of peer relations, self and work and career future orientation: Jewish adolescents. X_1 = perceived peer relationship/companionship; X_2 = perceived peer relationship/support; X_3 = perceived peer relationship/negative; Y_1 = self esteem/positive; Y_2 = self esteem/negative; Y_3 = self agency/independence; Y_4 = self agency/self reliance; Y_5 = self agency/self assurance; Y_6 = value; Y_7 = expectance; Y_8 = internal control; Y_9 = my future occupation; Y_{10} = my future professional career; Y_{11} = my future workplace; Y_{12} = exploration; Y_{13} = commitments. Factors loadings (lambdas) from .36 to .96; N = 358; χ^2 (111) = 245.65; p < .001; RMSEA = .06; CFI = .92
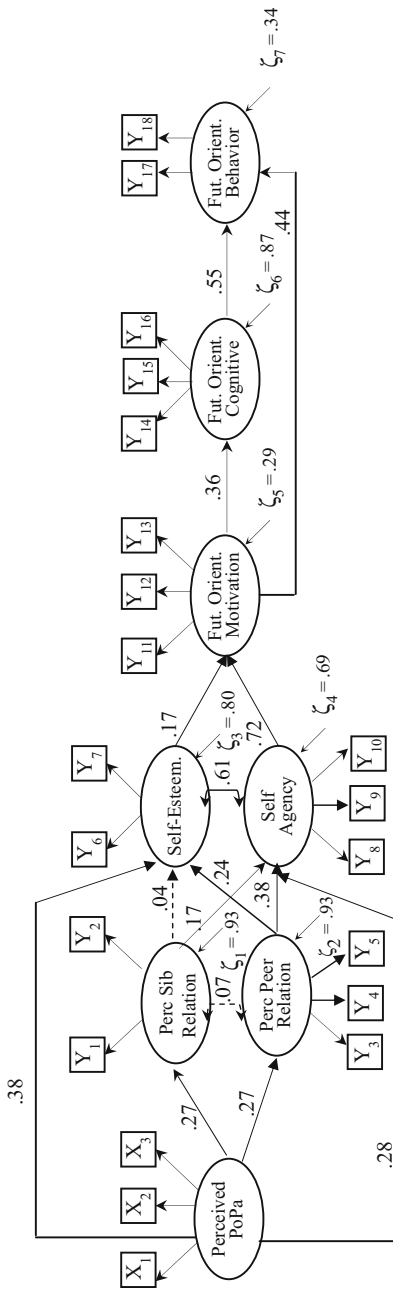
Fig. 6.5 Empirical estimate for a model of perceived parenting, perceived sibling relationship, perceived peer relations, self and work and career future orientation: Jewish adolescents. X_1 = perceived parenting/acceptance; X_2 = perceived positive parenting/granted autonomy; X_3 = perceived positive parenting/limit setting re peers relations; Y_1 = perceived sibling relationship/positive; Y_2 = perceived sibling relationship/future related; Y_3 = perceived peer relationship/support Y_4 = perceived peer relationship/ companionship; Y_5 = perceived peer relationship/negative; Y_6 = self esteem/ positive; Y_7 = self esteem/ negative; Y_8 = self agency/independence; Y_9 = self agency/self reliance; Y_{10} = self agency/self assurance; Y_{11} = value; Y_{12} = expectance; Y_{13} = internal control; Y_{14} = my future occupation; Y_{15} = my future professional career; Y_{16} = my future workplace; Y_{17} = exploration; Y_{18} =commitment. Factors loadings (lambdas) range from .36 to .94; N = 358; χ^2 (219) = 452.27; p < .001; RMSEA = .06; CFI = .91

Parenting and peer relationship. When parenting and peer relationship are included in the same model, like in the case of the parenting and sibling relationship (Fig. 6.3), both self esteem and self agency affect peer relationship. However, while sibling relationship is indirectly linked to the motivational component only via self agency, peer relationship is linked to the motivational component via both self esteem and self agency. Thus, the divide is not between family and non-family or between generations but rather between more and less meaningful relationships, and reiterates the growing meaningfulness of adolescent peer relations. Possibly guided by adolescents' need for individuation, relationship with siblings is linked to future orientation via self agency that indicated by self reliance, independence, and personal strength represents the interpersonal aspect of the self.

Parenting, sibling and peer relations. In light of its similar effect on future orientation, the inevitable question is whether, when added to parent-adolescent and sibling relationship, peer relationship still maintains its effect on future orientation? Figure 6.5 shows it does. Moreover, analysis of the joint effect of parent, sibling and peer relationships reiterates the effect of parenting on relationships with contemporaries and the different paths through which parenting and peer relationship on the one hand and sibling relationship on the other hand affect future orientation. Analysis carried out on Israeli Arab adolescents (Fig. 6.6) shows that despite cultural differences, the structure of the joint effects of the three interpersonal relationships on future orientation is similar.

## The Future Orientation of Classmates

Underlying the decision to study this issue is a basic premise about the significance of interaction with classmates for the formation of adolescents' future orientation. Undoubtedly, classmates do not overlap with one's peer group: some classmates are not counted as belonging to the peer group and some of their peers may not be attending the same class. This is particularly characteristic of Arab adolescents whose peer group includes siblings and cousins (Booth, 2002).

However, whereas in American high schools classroom composition varies with school subject, in other parts of the world including Israel, assignment of students to their classrooms is stable across the school year and in some cases across all high school years, and based on academic and administrative considerations rather than on students preferences. Consequently, the classroom is a significant social unit and researchers' concern (e.g., Brown, 2004) that the effect of peer relationship is confounded with their selective nature does not apply.

Thus, three questions about the effect of classmates on future orientation are relevant: do classmates affect adolescents' future orientation? Does culture matter? Do peer effects vary by age?

The relations between classmates' and adolescents' future orientation. Those observing adolescents' activities during school breaks notice that much of the time between classes is devoted to talking. While group composition may change,

a. Girls
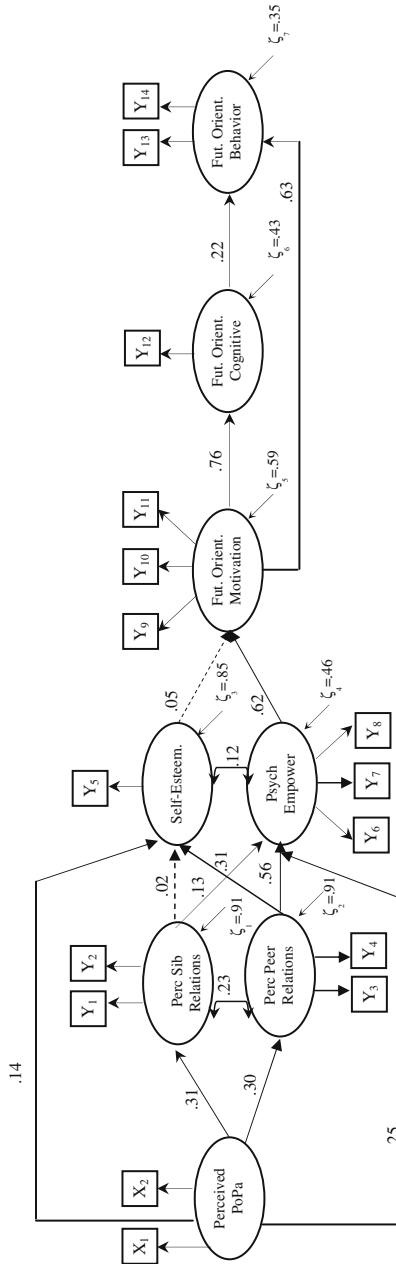
Fig. 6.6 Empirical estimate for a model of perceived parenting, perceived sibling relationship, perceived peer relations, self and higher education future orientation: Arab adolescents. X_1 = perceived positive parenting/acceptance; X_2 = perceived positive parenting/granted autonomy; Y_1 = perceived Sibling Relationship/positive; Y_2 = Perceived Sibling Relationship/future related; Y_3 = perceived peer relationship/ positive; Y_4 = perceived peer relationship/future related; Y_5 = self esteem; Y_6 = psychological empower/intrapersonal; Y_7 = psychological empower/interpersonal; Y_8 = psychological empower/behavior; Y_9 = value; Y_{10} = expectance; Y_{11} = internal control; Y_{12} = my future education; Y_{13} = exploration; Y_{14} = commitment. Factors loadings (lambdas) for girls from .33 to .97, and for boys from .48 to .97; **a.** N = 585; χ^2 (91) = 282.21; p < .001; RMSEA = .06; CFI = .95; **b.** N = 358; χ^2 (91) = 216.41; p < .001; RMSEA = .07; CFI = .94

b. Boys
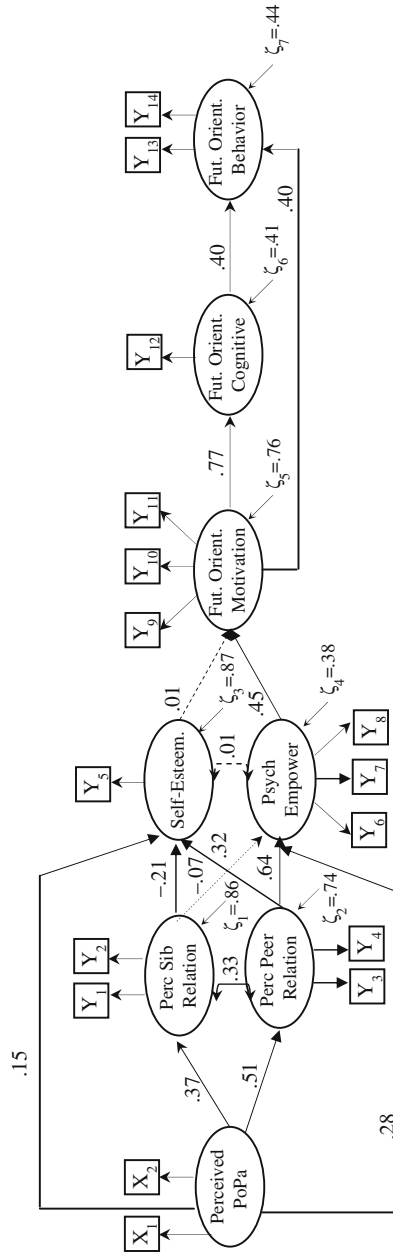
Fig. 6.6 (continued)

conversation with same-gender peers tends to be the norm. Therefore and despite the similarity between the prospective trajectory of girls and boys in many western societies, the analysis presented here is based on same-gender comparisons (Table 6.1).

This analysis shows that the relations between adolescents' and classmates' future orientation scores are of relatively low magnitude but consistent across the different variables, prospective life domains, gender, and cultural settings, specifically pertaining to Arabs and Jews. Thus, the rationale presented earlier that Arab girls may be influenced either more (because they cannot consult their families) or less (because they grow up in a familistic society) than western adolescents and the rival hypotheses deduced from them have not been supported. In a similar vein, no differences were found for gender and age comparisons. Instead, the effect of classmates is moderate but consistent across diverse conditions and future orientation domains.

Peer Influence: What Adolescents Do and Report

Group interaction effects. As in several other areas of future orientation research, Trommsdorff (1982) has been a pioneer. Along with her interest in the effect of home atmosphere on adolescents' future orientation (Chap. 5), she also studied how university students in a group setting affect each other's future orientation. Drawing on social psychology of groups theories Trommsdorff and her colleagues ran several experiments on the effect of group discussion on subjective probabilities of a person's future success (or failure) of materialization of goals among German university students.

While we would expect group discussion to prompt positive thinking and raise one's success probabilities, the results of those experiments were to the contrary. Trommsdorff's explanation of those counterintuitive results rest on the assumption that optimism regarding one's success would be regarded by the group as unduly and arrogant thus leading group members to public reduction of their positive outlook toward the future. This interpretation can be viewed in the wider perspective of cultural effects. As noted by Goodnow in relation to planning, "The nature of the general social environment gives rise. . .to variations in the extent to which planning meets with approval or disapproval and in the content areas for which planning is seen as appropriate" (Goodnow, 1997, p. 340). Correspondingly, the social setting of those students considered expressions of optimism about the future as undesirable. Nonetheless, the extent to which participants distinguished between public appearance and private beliefs, the duration of the effect of group pressure, as well as the effect of real life groups were beyond the scope of those experiments and thus were not reported.

This question has been tested in a study (Young et al., 1999) that examined the effect of conversation on the formation of future career goals among Canadian high school students (13–19 years old) who led conversations about future career issues with a self-selected partner. As researchers were observing the process the dyad

Table 6.1 The relation between adolescents' and classmates' future orientation scores

	Jewish adolescents							Arab adolescent girls			
	9th graders		11th graders					11th graders			
	Girls (n = 87)	Boys (n = 81)	Girls (n = 188)		Boys (n = 170)			Traditional (n = 225)		Transition to modernity (n = 208)	
	Higher Education		Career	Family	Career	Family		Hi Educ	Family	Hi Educ	Family
Value	0.22*	0.27**	0.28***	0.30***	0.24***	0.22**		0.14*	0.21***	0.35***	0.36***
Expectance	0.34***	0.22	0.33***	0.37***	0.29***	0.23***		0.24***	0.24***	0.27***	0.27***
Control	0.28**	0.28**	0.20**	0.25***	0.19**	0.23***		0.20*	0.17*	0.29***	0.30***
Cogn Rep Hopes	0.39***	0.48***	0.36***	0.32***	0.35***	0.29***		0.29***	0.32***	0.33***	0.23***
Cogn Rep Fears	0.15	0.54***	0.28***	0.37***	0.32***	0.26***		–	–	–	–
Exploration	0.24*	0.20	0.25***	0.37***	0.31***	0.33***		0.24***	0.34***	0.34***	0.24***
Commitment	0.22*	0.14	0.32***	0.31***	0.34***	0.28***		0.14*	0.23***	0.22*	0.30***

*p < .05
**p < .01
***p < .001

underwent in discussing career issues, they identified several steps through which conversation partners facilitated each other in reaching a better understanding ("self-refining") of their future career goals.

Common to both studies has been the effect of others on one's future orientation. However, be it the result of time and place (German university during the 1970s vs Canadian high school in the late 1990s), group composition (group consisting of several members vs dyad), self-selected vs experimentally contrived groups, or research questions and instructions given to participants, the nature of the peer effects and hence the investigators' conclusions point in opposite directions. Age (high school vs university students) is another relevant variable on which the two groups differed. Its pertinence has been attested in a study (Steinberg & Monahan, 2007) showing the greater resistance of younger (high school students) than older adolescents to group pressure. Nonetheless, these studies set the stage for further research on the effect of interpersonal interaction on the formation of future orientation.

Adolescents self reports. When asked to whom they turn when considering future oriented issues, more American adolescents reported they consult parents than peers (Brittain, 1963; Sebald, 1986). However, to understand its meaning, this tendency should be viewed in light of two other findings. One is that those adolescents followed the principle of "division of labor": they consulted their peers on peer relevant issues such as social activities (dating, clothing, music) and parents on financial, educational and future career issues that call for adult experience and expertise. The second pertains to the relevance of the social-historical context showing that as political atmosphere changed from conservatism (in the early 1960s) to liberalism (mid-1970s), the pendulum swung and adolescents reported that on future oriented issues they relied on peers' advice more than on that of parents.

Summary

At present our knowledge regarding the effect of siblings and peers on the construction of adolescent future orientation is rather limited. Nonetheless, current research provides preliminary answers to several questions. The first relates to the effect of sibling and peer relationships showing that each has positive effect above and beyond the effect of parenting on future orientation. However, while parenting and peer relationship affect future orientation via two aspects of the self – self-evaluation and self-agency for Jewish adolescents and psychological empowerment for Arab adolescents – sibling relationship affects it only via the interpersonal aspect of the self pertaining to self agency or psychological empowerment.

The extent to which peer interaction and the processes underlying it facilitate future orientation thinking and behavior has been studied even less. Results differ in the direction of the effect – that is, whether interaction with peers encourages or discourages the construction of positive plans for the future – but agree about the power of peer interaction on future thinking and adds to the overall conclusion on the relevance of contemporaries to the construction of adolescent future orientation.