# Commentary: Lessons From a Life-Span Perspective to Adolescent Decision Making

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The chapters in Part II address important aspects of adolescent decision making that have received little attention in the literature to date. Decision making is examined as adolescents make decisions regarding their after-school activities (Gauvain & Perez, chap. 7), make decisions utilizing democratic versus authority-based justifications (Helwig, chap. 6), make judgments regarding the frequency with which peers in general engage in deviant behaviors (Jacobs & Johnston, chap. 5), and utilize regret to avoid making bad decisions (Amsel, Bowden, Cottrell, & Sullivan, chap. 4). These chapters address crucial issues in the field concerning how to characterize the adolescent decision maker (e.g., competent vs. incompetent), the domain of decision making (from the more everyday task of making decisions regarding which after-school activity to be involved in to decisions regarding at-risk behaviors), and the development of decision making across adolescence (gaining autonomy to make independent decisions). Cutting across these chapters are three themes: (a) adolescent decision making occurs in a rich context of parental, peer, and cultural influences; (b) individual autonomy guides much of the decision making of adolescents; and (c) adolescents are both competent and cognitively mature as well as incompetent and risky decision makers. These themes are consonant with a broader life-span developmental perspective to decision making. In my comments, I elaborate on how lessons learned within a life-span perspective to adolescent decision making may prove useful in the next steps in this literature as researchers continue to broaden the scope of models and tasks to capture the complexity of decision-making processes as they occur in adolescents' daily lives.

## ADOLESCENT DECISION MAKING OCCURS IN A SOCIAL AND CULTURAL CONTEXT

A central tenet of a life-span perspective to development is that development occurs in a rich network of interconnected contexts that change across age and historical time (Baltes, 1987; Bronfenbrenner, 1979). The chapters point out three factors in adolescents' contexts that are important for understanding decision making: parents, peers, and the broader culture. The importance that parents play in adolescents' lives (Steinberg & Silk, 2002) is no more apparent than when making decisions that have been characterized as "risky" or "deviant" (Brown, Mounts, Lamborn, & Steinberg, 1993; Herman, Dornbusch, Herron, & Herting, 1997). Adolescents benefit when parents monitor adolescent behavior while allowing adolescents to exercise their independence in decision making (Steinberg & Morris, 2000). However, often during adolescence, parents' involvement can be characterized as too intensive and potentially intrusive (Barber, 2001; Pomerantz & Ruble, 1998). Parents' use of controlling involvement is associated with important aspects of parental style (e.g., authoritarian vs. authoritative). Parental style may also affect the opportunity for democratic versus authority-based decision making in the family (Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994).

The different ways that parents can interact with their children (control, showing warmth and acceptance, collaboration) may inform some of the research results in Part II of this volume. For instance, Gauvain and Perez (chap. 7) found that the children who experienced the most distress over their after-school activities were those whose parents believed that adolescent independence in making those decisions should come at a later age. Children's distress may not necessarily have come about because parents were simply involved in making those activity decisions, but because the form of that involvement was intrusive, controlling, and unsolicited. Adolescents often interpret from such intrusive parental involvement the message that they [adolescents] are incompetent and cannot make competent decisions, thereby producing distress (Pomerantz & Eaton, 2001). An important direction for work on adolescent decision making will be to gain a more specific understanding of the ways in which parents are involved in the decision making of their adolescents. In addition, this literature may profit from work on the socialization of memory (Nelson & Fivush, 2000) and coping (Kliewer, Fearnow, & Miller, 1996) to understand how families may provide more direct modeling, coaching, and instruction in decision-making processes. Families differ in terms of their direct experience with deviant behaviors engaged in either by parents or siblings (Capaldi, Pears, Patterson, & Owen, 2003; Thornberry, Freeman-Gallant, Lizotte, Krohn, & Smith, 2003), and in the style with which they engage in decision making with their adolescents (Steinberg et al., 1994). The different experiences that families provide

children may be useful in understanding the development of adolescent decision making.

A contextual factor only hinted at in these studies is the influence of peers. Across adolescence, individuals spend increasing amounts of time with their peers (Larson & Richards, 1991) and peer influence on behavior also increases. The potential importance of the peer group is most apparent in the work of Jacobs and Johnston (chap. 5). In their work, adolescents were to make judgments concerning base rates of peers' deviant behaviors and victimization. Unpacking "peers" in their methodology will be important. That is, if adolescents interpret peers as "those adolescents at my school whom I know engage in risky behaviors versus those in my own network of friends," estimation of deviant behaviors may be different. Peers may also contribute to the stress and satisfaction with activity choices examined in chapter 7 by Gauvain and Perez. That is, children's satisfaction with their activities may be different when activity frequency is low compared to one's peers (i.e., "I only get one after school activity but my friends are doing five") versus on par with one's peers.

In chapter 6, Helwig points out how cultural beliefs (e.g., independence vs. interdependence) may affect the types of justifications adolescents make concerning authority versus autonomous decisions. However, his work cautions us from overinterpreting culture as overriding more normative needs for autonomous decision making by adolescents. Culture was clearly important in Gauvain and Perez's (chap. 7) study of activity choices and expectations in European American versus Latino American parents. Unpacking the meaning of *culture* (e.g., parental style, expectations concerning adolescent independence vs. interdependence) will be important in understanding when culture is useful in predicting aspects of adolescent decision making.

A life-span developmental perspective would remind us that such contextual influences may change across historical time. A central tenet of life-span developmental psychology (Baltes, 1987; Schaie, 1984) is that development is influenced by the historical time in which one lives (i.e., cohorts may differ in their development) as much as by age. This is immediately apparent to me as I now experience adolescence from my children's perspective. Some relevant aspects of the changing context of adolescence for decision making include the following: (a) earlier onset of puberty (Herman-Giddens et al., 1997); (b) adolescence as a time period is now drawn out such that it may not end until the late 20s; (c) changing frequency of "risky" adolescent behaviors in the peer groups (increase in violent weapons in our schools; National Center for Education Statistics, 1998); (d) burgeoning availability of out-of-school activities (Cappella & Larner, 1999; e.g., availability of sports for girls); and (e) changes in cultures that have been traditionally characterized as collective (reviewed by Helwig, chap. 6). Such factors may influence the age by which adolescents expect to make autonomous decisions, when

society views children as "adolescent" decision makers, and the frequency with which adolescents are faced with difficult domains of decision making. As I read the chapters in this part, I asked myself what the results would have been like when I was an adolescent or what the results will be 40 years from now. As researchers work toward identifying key aspects of adolescent decision making, we must acknowledge that these aspects may change with changes in the sociocultural and biological contexts of adolescence.

## INDIVIDUAL AUTONOMY AS AN IMPORTANT COMPONENT OF ADOLESCENT DECISION MAKING

In several of the chapters, the importance of individual autonomy and independence is highlighted as a critical component of adolescent decision making (most notably, Helwig, chap. 6, and Gauvain & Perez, chap. 7). From a life-span perspective (Erikson, 1968), gaining a separate identity from one's parents is a key developmental life task of adolescence. Helwig's results indicate that individual autonomy is even important in "collectivistic" cultures that are oriented toward authority and obedience to family. Gauvain and Perrez's results indicate that children are less satisfied with their activity choices when they are less independent in making those choices. These characterizations of adolescence as a time for independent, autonomous behavior are consistent with long-standing notions of adolescence as a time when children renegotiate the influence of parents in their lives to become more self-reliant (Erikson, 1968; Greenberger, Josselson, R. Knerr, & B. Knerr, 1974; Steinberg & Morris, 2000). However, most conceptualizations of autonomy emphasize that healthy autonomy development occurs when adolescents gain self-reliance while maintaining emotional bonds and connections to parents (Steinberg & Morris, 2000; Steinberg & Silverberg, 1986).

This conceptualization of optimal adolescence as self-reliant but connected to parents is an important one for understanding adolescent decision making. How can adolescents gain independent control over their behavior and decisions while maintaining connections to parents? In our own work examining how adolescents with type 1 diabetes make decisions regarding successful management, we have found that it is crucial for adolescents to feel that their parents are "collaborators" in the decisions they make, even though the adolescents' behavior looks quite independent (Palmer et al., 2004; Wiebe et al., in press). That is, across adolescence, children become much more independent in the behaviors that make up the management of diabetes (e.g., determining insulin doses, checking blood glucose levels). However, for successful management to occur, adolescents must perceive that parents are available as collabo-

rators or support-providers when difficult management episodes occur. Viewing parents as uninvolved in these difficult episodes is associated with poorer metabolic control and psychosocial outcomes.

This view of adolescent decision making as autonomous but connected works well for the types of decision making examined in the present chapters. Healthy adolescent development can be construed as children gaining autonomy in making decisions regarding activity choices, decisions to avoid deviant behaviors, decisions involving regret, and those involving authority. However, when problematic situations arise with respect to these decisions, adolescents must view that parents are available as collaborators to help them generate solutions, evaluate the efficacy of those decisions, and to anticipate regret from making various decisions.

A life-span perspective, however, would caution us from making generalizations about what characterizes "adolescent" behavior from cross-sectional data. All of the researchers in this part wish to identify what uniquely characterizes adolescent development from later childhood and adulthood. However, most of the studies presented examine a fairly narrow age range (Gauvain & Perez examine 7- to 10-year-olds in chap. 7; Jacobs & Johnston examine 14- to 16-years-olds in chap. 5), do not compare adolescents with children or adults (Helwig, chap. 6), or involve large age-group differences (Amsel et al. compare fourth- to fifth-grade students with college students). Much more systematic consideration of age and the corresponding changes that are thought to occur with age (marked by puberty, autonomy granting, etc.) are needed. In addition, this literature would greatly benefit from longitudinal research where the multiple changes that are occurring can be tracked with much greater precision. Longitudinal research will assist in understanding what demarcates adolescent from adult decision making and from middle-childhood development. The field may also benefit from an understanding of the commonalities across development in decision-making performance (e.g., use of heuristics, influence of emotion-driven processes, priming).

A second life-span principle proposed by Baltes (1987) that will be useful in understanding the development of adolescent decision making is that throughout the life span, development consists of the joint occurrence of gain (growth) and loss (decline). The authors of these chapters seek to understand what characterizes the development of decision making from a gain (or growth) model only. For instance, a key change that is noted in the present chapters that occurs across development is reported in chapter 4 by Amsel and colleagues, who characterize adolescent decision making as gaining the potential for utilizing regret to avoid poor decisions. Although this clearly is a gain, I wondered what an adolescent would lose with this gain. Given that regret may evoke "negative emotions," would adolescents lose the broadening of attention and cognition that positive emotions may trigger

(Fredrickson & Joiner, 2001)? A closer examination of both the gains and losses involved in the development of adolescent decision making would assist in the development of models of decision making across the life span.

## ARE ADOLESCENTS COMPETENT AND MATURE DECISION MAKERS OR INCOMPETENT RISKY DECISION MAKERS?

In chapter 4, Amsel et al. nicely describe the conundrum in the adolescent literature between characterizing adolescents as "thoughtful and impulsive, deliberative and impetuous, or reflective and foolhardy" (p. 119). This conundrum comes about largely because of the normative models (expected utility; information-processing-based rational models) on which all decision making is based. As I read the chapters on adolescent decision making, I wondered how different adolescent decision making really is from adult decision making. Could not the same characterizations of adolescents (i.e., thoughtful and impulsive, deliberative and impetuous) characterize adults' decisions regarding whether to engage in potentially risky behaviors (e.g., investing in a volatile stock market, having an affair that may cause the dissolution of one's marriage, trying diet supplements to lose weight)? Both adolescent and adult decision making can be characterized by competence and incompetence, rationality and irrationality, depending on the specific domain of decision making and the activation of one's emotional, cognitive, and motivational systems (Berg & Klaczynski, 2002; Klaczynski, 2000).

I will illustrate what I perceive as the overly "cold cognitive and rational" side of current decision-making models with some personal experiences. My 11-year-old daughter and I have fairly heated discussions on an increasingly regular basis about numerous decisions (e.g., whether she can sit in the front seat of my vehicle—an Explorer with the older generation air bag, go to the mall with her friends unattended, skip her group lesson for violin, participate in competitive soccer on top of all of her other activities). She has a difficult time utilizing her developing cognitive competencies as we engage in joint decision making with respect to any of these decisions (as her mother I, too, do not always utilize my cognitive competencies alone to make such decisions). The model that underlies our decision-making process is much more complex than the componential models utilized traditionally in the decision-making literature (see Byrnes, 2002; Klaczynski, Byrnes, & Jacobs, 2001), whereby individuals set goals, compile and evaluate decision-making options, and enact a particular strategy. Instead, I am struck by how we utilize our cognitive competencies in a self-serving fashion (Klaczynski, 2000), draw on different pools of knowledge, experience strong emotions that influence our memories of past decision-making events (Levine & Stein, 1999), and utilize different compari-

sons. (My daughter utilizes strong self–other comparisons—"Everyone else is doing it," I use present–past comparisons—"When I was your age, I only had one after-school activity.") Throughout our decision making I see the different developmental life tasks that organize our approach: her autonomy-based needs and my generativity goals. Such factors have received sparse attention in the literature on adolescent decision making. Models such as Klaczynski's (2000) dual-process model of cognition that seeks to understand how adolescents and adults can appear to be rational and self-serving across problems, depending on motivation, are important in understanding how adolescents (and adults) can be both competent and incompetent, rational and heuristic. Such models will be important in capturing the richness of decisions that dominate the adolescent literature (e.g., avoiding risk taking behaviors) as well as more typical decisions adolescents must make on a more daily basis (e.g., whether to take on another after-school activity, take the science book home to study for the test tomorrow, etc.).

The development of models of decision making will benefit from a broadening of the types of tasks used to assess decision making. The literature on adolescent decision making has focused nearly exclusively on "risky" decisions (Beyth-Marom & Fischhoff, 1997). However, there are numerous domains of decision making that could be examined, utilizing the extensive work done on adolescents' activities (e.g., Larson & Richards, 1991), everyday problem solving (e.g., Berg, Strough, Calderone, Sansone, & Weir, 1998), and stress and coping (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001) to guide their development. For instance, just a few of the decision tasks that come to mind include decisions as to whether to spend additional time on a project at school, to try out for the school play, deciding to try out for advanced classes or competitive sports teams, or a decision to take an oral contraceptive. By enlarging the realm of tasks that researchers examine, we may be able to bring factors into our models (e.g., emotion, social understanding, etc.) that better represent the richness and complexity of adolescent decision making. Although there is always the tendency to simplify tasks so as to exert control, the design of tasks will need to match the complexity of the processes involved (e.g., researchers should not necessarily abstract from decisions regarding regret over trading lottery tickets to regret over engaging in risky sexual behavior).

## SUMMARY AND CONCLUSIONS

The chapters in Part II represent an important advance in the field of adolescent decision making as researchers address crucial questions concerning how to characterize the adolescent (competent vs. incompetent), the domain of decision making (estimation of risks regarding hypothetical tasks vs.

actual decisions) and the processes of decision making (focused on componential rational processes or irrational ones). These chapters push the field to broaden the scope of adolescent decision making, incorporating factors such as autonomy and the sociocultural context into current models. In my comments, I have described how lessons learned from a life-span perspective to development may assist in understanding the context of adolescent decision making, developmental factors in decision making, and the rational and irrational side of adolescent decision makers. A crucial next step in this literature is to embrace the diversity present in adolescent decision making across adolescents, tasks, and contexts. The chapters in this part provide an excellent basis for this expansion.

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