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## Risk Taking as Developmentally Appropriate Experimentation for College Students

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*Researchers have suggested that experimentation may be a necessary, constructive component of identity formation. However, these researchers have also noted the paradox of risk taking; an individual may experience both positive and negative precursors and consequences of risk taking. The present investigation used qualitative methods to explore the personal meaning of experimentation behaviors and of this paradox to college students. A stratified sample of 12 community college students (6 female) and 20 university students (10 female) was interviewed. Data were analyzed using grounded theory methods. Students described a deliberate and functional process of experimenting with a variety of risk behaviors. This included articulating the ways in which the college culture promotes participation in risk behaviors as developmentally appropriate experimentation.*

**Keywords:** *experimentation; risk taking; college; emerging adult; youth; qualitative*

The concept of risks as opportunities for adolescents can be traced back to the work of G. Stanley Hall (1904). Hall argued that parents and educators should exert limited control over adolescents, thereby enabling their experimentation. However, this perspective has not received serious attention until recently (Lightfoot, 1997). From this perspective, it has been suggested that risk behaviors are deliberate and goal directed, the product of subjectively rational decisions. In fact, scholars have posited that adolescents actively choose and shape their environment and actively seek out risks because of the potential for challenge and excitement (Chassin, 1997; Lightfoot, 1997). It has further been argued that experimentation serves developmentally appropriate functions (Baumrind, 1985; Jessor & Jessor, 1977; Maggs, Almeida, & Galambos, 1995; Silbereisen, Noack, & Reitzle, 1987), such as facilitating

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peer interactions, teaching youth to negotiate behaviors that become legal post-adolescence, and facilitating identity achievement. This perspective challenges the traditional assumption that adolescents are merely victims of antisocial peer influences (Chassin, 1997) and presents risk behaviors as experimentation behaviors that afford youth positive developmental opportunities.

However, researchers have also noted the paradox of risk taking; an individual may experience both positive and negative precursors and consequences of risk taking (Maggs et al., 1995; Maggs & Hurrelmann, 1998). The present investigation used qualitative methods to explore the personal meaning of experimentation behaviors and of this paradox to emerging adults in college. Emerging adults are in a transitional period between adolescence and young adulthood, actively experimenting to figure out who they are (Arnett, 2000). College students are often immersed in an antiacademic culture of athletics, campus parties, drinking, fraternities and sororities, and dating (Sperber, 2000). Thus, emerging adults in college are an ideal population to ask about their experiences.

## LITERATURE REVIEW

During college, the majority of individuals participate in at least one behavior that adults would consider dangerous and health compromising. Specifically, rates of participation with most substance use, alcohol use, and unprotected sexual activity have been found to peak during emerging adulthood (Johnston, O'Malley, & Bachman, 2003). In addition, college students are more likely to be binge drinkers than their same-age noncollege counterparts. However, in high school, college-bound seniors are less likely to report heavy drinking than non-college-bound youth. This suggests that emerging adults in college "catch up to and pass" their noncollege peers (Johnston et al., 2003, p. 21). This is not surprising given that college students are in a life stage characterized by risk and testing their limits to find out who they are, living in a relatively unregulated environment surrounded by same age peers (Arnett, 2000). Fortunately, the majority of these emerging adults are not subject to drastic consequences (Arnett, 1991). Still, there is tremendous concern among parents and educators regarding how to protect emerging adults from these outcomes. Parents and educators strive to help emerging adults make responsible decisions about potentially risky behaviors and to reduce the number of tragedies resulting from poor decisions.

In a study of college students, Parsons, Siegel, and Cousins (1997) found that the perceived benefits of an outcome were more predictive of partici-

pation in risky behaviors than students' assessment of the perceived risks. Emerging adults seeking out these benefits might be described as sensation seeking (Zuckerman, 1990). Individuals high on the sensation-seeking personality trait desire sensory stimulation. College students high in sensation seeking, immersed in the college culture, are likely to be seduced by the excitement and intensity of risk behaviors (Horvath & Zuckerman, 1993). And the college culture abounds with opportunities for risk. Unfortunately, the line at which experimentation behaviors become dangerous is often blurred. It is a challenge to determine the point at which developmentally beneficial behaviors become dangerous (Irwin, 1993).

Experimentation behaviors are not inherently dangerous or problematic, rather, negative outcomes occur under certain conditions. It is unlikely that a behavior will be either entirely problematic or conventional. It is possible to engage in both groups of behaviors simultaneously. College students may participate to a greater or lesser degree in a problem behavior and may do so independently of, or in addition to, engaging in more conventional behavior (Jessor & Jessor, 1977). For example, all alcohol use is not the same. There is a difference between having a few sips of beer and getting drunk four times a week. There is a difference between having alcohol during a holiday dinner with family and drinking with friends. There is a difference between drinking and drinking that is followed by driving. Behavior is the product of the interaction between a person and his or her environment. Therefore, to fully understand college student behavior, the influence of both these factors must be examined simultaneously (Jessor, 1987).

To begin to explore this, Shedler and Block (1990) categorized a sample of young people into three groups based on their level of substance use. They defined frequent users as youth who used marijuana frequently and had tried at least one other drug. Abstainers were defined as youth who had never tried drugs. Experimenters were defined as youth who used marijuana no more than once a month and who had tried no more than one other drug. Their data revealed that beginning in childhood, experimenters demonstrated the most positive outcomes. Frequent users were described as undercontrolled and these youth reported being more alienated, distressed, and having less impulse control than experimenters. Abstainers were described as overcontrolled and unnecessarily delaying gratification. These youth reported feeling more anxious, emotionally constricted, and having poorer social skills than experimenters.

Maggs and colleagues (e.g., Maggs et al., 1995; Maggs & Hurrelmann, 1998; Schulenberg, Maggs, & Hurrelmann, 1997) have consistently found that young people who experiment, in a controlled way, with risk behaviors show the most positive developmental outcomes. For instance, substance use

has been found to facilitate peer relationships for adolescents. Research has concluded that adolescents who experiment with substances show higher levels of peer acceptance and involvement, compared with young people participating in more delinquent, antisocial behavior who have fewer and less satisfying peer relationships (Maggs et al., 1995; Maggs & Hurrelmann, 1998).

The finding that participation in risk behaviors often accompanies positive developmental outcomes, in combination with high rates of participation in certain risk-taking behaviors, such as alcohol use, supports the contention that a certain level of risk taking is normative for young people (Baumrind, 1985; Schulenberg et al., 1997; Shedler & Block, 1990). Consequently, to fully understand risk during emerging adulthood, we must recognize and consider both risks and opportunities. The present study builds on this perspective by exploring emerging adults' perspectives of risk behaviors.

### **Present Investigation**

College creates an experience that encourages a period of experimentation that is longer than experienced by previous generations and perhaps longer than experienced by emerging adults who do not attend college full-time immediately following high school. As a result, college students are at risk for crossing the unclear boundary between healthy experimentation and dangerous risk taking by participating in behaviors such as binge drinking and unprotected sexual activity. Sperber (2000) even argues that colleges advertise an uninhibited collegiate subculture centered around leisure to attract students, and this culture "demands beer" (p. 192).

The present study is designed to explore the process of experimentation from the viewpoint of the experimenters and to work toward a better understanding of experimentation behaviors. The following questions are addressed:

1. In what ways do emerging adults view risk behavior as a form of developmentally appropriate experimentation?
2. How does the college culture promote risk as experimentation?
3. How does experimentation reflect what is going on developmentally during emerging adulthood?
4. What are the implications of these findings for research and for outreach?

The present investigation used in-depth interviews. In-depth interviewing provides access to a clearer understanding of why people act as they do by working toward an appreciation of the meaning they give to their behaviors

(Jones, 1985). Interviews address an individual's subjective experience of a preanalyzed situation in an attempt to draw out his or her definitions of the situation. Allowing emerging adults to describe their experiences, in-depth, using their own words, provides the best understanding of their construction of their experiences with experimentation (Jones, 1985). Interviews help formulate new hypotheses that will support the systematic examination of experimentation behaviors in the future (Merton, Fiske, & Kendall, 1990).

## METHOD

To obtain a more holistic view of experimentation, I used a dual interpretive methodology. First, a phenomenological perspective guided data collection and analysis (van Manen, 1984) to provide access to the meanings that individuals assign to the process of experimentation (Morse, 1994). Second, grounded theory (Glaser & Strauss, 1967) provided a method for building a theory of experimentation usable by scholars (Morse, 1994), without being limited by preconceived notions of risk taking (Glaser, 1978).

### Participants

A stratified sample of 32 college students was interviewed for this research (see Table 1). The sample was stratified across institution, gender, age, and ethnic group. Twenty students were recruited from a large midwestern university, and 12 students were recruited from a midwestern community college. Incorporating student experiences at different types of institutions allows for a sample and an experience more representative of college students. At the time of the study, all participants were full-time students. To assist with stratification, students were recruited through student organizations on each campus, including cultural, ethnic, arts, academic, and athletic organizations.

To recruit university students, an electronic mail message was forwarded to at least 1,500 students who were involved in registered student organizations. Students who had already participated recruited a few students through word of mouth. Interested participants were asked to contact me directly to learn more about the study and arrange a time for an interview. Because of the large number of university students who volunteered to participate, I was able to select the students I chose to interview. Interested students were sent an electronic mail message requesting their gender, age, academic year, ethnicity, and when they would be available for an interview. University students were then selected for interviews based on gender, academic year, and eth-

**TABLE 1: Participants**

<i>Demographics</i>	<i>Community College (n = 12)</i>	<i>University (n = 20)</i>
Age		
18 years	2	1
19 years	4	5
20 years	3	4
21 years	2	7
22 years	1	3
Gender		
Female	6	10
Male	6	10
Ethnicity		
Latino	0	6
African American	3	6
White	8	8
Asian (not U.S. born)	1	0
Hometown		
Urban	2	8
Suburban	4	7
Rural	6	5
Family structure		
Two-parent family	7	14
Single-parent family	4	5
Grandparent(s)	1	1

NOTE: Cells = *n*.

nicity. Every student I contacted to participate in an interview participated. The lower response rate at the community college did not allow me to be as selective.

To recruit students at the community college, I contacted the director of student life who provided me with a list of student organizations. Because of the limited number of organizations, an electronic mail message describing the study was sent to the 15 faculty advisors who were responsible for active student organizations. Six advisors responded to my initial electronic mail. Phone calls were then made to the advisors who did not respond. As a result of this effort, three advisors agreed to forward an electronic mail message to group members. The electronic mail message described the study and requested that interested students contact me directly to learn more about the study and arrange a time for an interview. Two advisors agreed to allow me to speak to their groups. In the groups, I handed out fliers and had interested students provide contact information. The sixth advisor was responsible for an

inactive organization. She agreed to mention the study to students with whom she still had contact. Approximately 100 students were contacted either via electronic mail or in person about the study. Again, a few participants were recruited through word of mouth, by students who had already participated, and by the director of student life. With the exception of one, all students whom I contacted to participate in an interview, participated.

There was much diversity among the community college students whom I interviewed, which reflects the diversity of community college students. The majority of students whom I spoke with were planning on transferring to a 4-year college. One student attended a state university and only attended classes at the community college in the summer. Three students were attending the community college because they had academic trouble at a 4-year university and decided they wanted to remain in college. One of these students was planning on returning to the university to graduate.

### **Data Collection**

Students were interviewed individually, face to face. Interviews were in-depth and semistructured. Questions were developed from a thorough review of the literature to explore the meaning of risk taking and experimentation to college students (see the appendix for the core interview questions relevant to the present analyses). Interviews lasted between 50 and 90 minutes and were audiotaped. They were held at a time that was convenient for the student, either on the university campus or on the community college campus. Following the interview, participants completed a brief background questionnaire and a checklist assessing how frequently they participated in a variety of experimentation behaviors. Students received \$10 for their participation.

The first five interviews were conducted to pilot the interview protocol and are included in the data analysis. This allowed me to generate additional questions, eliminate questions, and adjust the order of the questions as needed. However, it should be noted that adaptations were made throughout the process of data collection to continuously adapt the interview and obtain the most complete data. This modification process is consistent with grounded theory methods (Strauss & Corbin, 1990).

Throughout data collection, I maintained a journal. Immediately following each interview, I recorded nonverbal expressions, emerging themes, interpretations, details of the interview, and conversations that were not recorded (Taylor & Bogdan, 1998). This information was treated as data and analyzed accordingly.

### Data Analysis

The present investigation relied on the constant comparative method of interpretive analysis. This method of analysis encourages systematic generation of theory through inductive coding and analysis (Glaser & Strauss, 1967).

These data were analyzed under the assumption that the data provided by participants corresponds to their actual experiences and to the meanings they apply to these experiences. In addition, interpretation of the data included distinguishing between solicited and unsolicited statements and considering how my background affected the direction of the interview and influenced the data (Taylor & Bogdan, 1998).

Consistent with the constant comparative method of interpretive analysis, data analysis consisted of seven steps, using three levels of coding. First, I transcribed the interviews verbatim, noting salient features such as long pauses and laughter (Riessman, 1993). To preserve participant confidentiality, the interviews were transcribed using pseudonyms and eliminating any identifying information. To ensure accuracy, I then carefully checked the transcripts against the tapes. The second step was to read the transcripts many times, looking for themes, patterns, and concepts. Each interview was summarized. Third, the interview data were sorted by the eliciting empirical interview question (see the appendix for the interview questions). Fourth, to categorize and sort the interview data, the data were coded into conceptual categories within empirical question. This was the first level of coding (Charmaz, 1988; Taylor & Bogdan, 1998). Every event and idea of a given phenomenon was named. Data were then grouped around phenomena, or categorized, thereby reducing the number of units of analysis (Strauss & Corbin, 1990). For example, in one set of analyses, data were grouped around the type of activity the student described.

Fifth, I performed axial coding, the second level of coding. Axial coding is a more intense form of coding centered on a specific phenomenon or category. It is used to identify the properties of the already identified categories, thereby providing more specificity. I labeled specific events and experiences within each phenomenon, thereby generating subcategories (Strauss, 1987). Analyses were conducted both within and between categories and within and between subcategories. For instance, grouping data by activity allowed for analyses both within and between social activities that did and did not involve substance use. I was then able to identify shared experiences between individuals and those experiences that were unique (Patton, 1990; Taylor & Bogdan, 1998).

Sixth, I performed selective coding, the third level of coding. To gain even more specificity, I coded those subcategories that were significantly tied to the core category and that facilitated an understanding of this category (Strauss, 1987). Finally, I identified the cases that did not fit the model as a way to either discount part of the model or for suggesting additional relationships (Strauss & Corbin, 1990; Taylor & Bogdan, 1998).

Following grounded theory procedures, after the data were coded, I diagrammed the relationships between constructs (Strauss & Corbin, 1990). Diagrams allowed me to visually depict the relationships between concepts and move from coding to defining the emerging concepts. After data analysis was complete, I went back to the literature to improve my understanding of the findings, not to support, discount, or provide additional data but to help explain the findings, and put them in a context (Strauss & Corbin, 1990).

The relationships that emerged from students' descriptions of their experiences and that were diagrammed are described in the following sections. These relationships are exemplified by direct quotes from students (Ryan & Bernard, 2000). Consistent with this process, the results and discussion are presented as one section.

## RESULTS AND DISCUSSION

Although risk taking has been explored extensively (Bell & Bell, 1993; Jessor & Jessor, 1977), researchers have yet to give as much attention to experimentation and include the emerging adult perspective in this definition. First, the relationship between experimentation and risk taking from the perspective of emerging adults will be explored. Next, I will consider the ways in which the college culture promotes emerging adult experimentation. Third, the ways in which experimentation is developmentally appropriate for college students will be considered. Finally, there will be a discussion of the implications of these findings for research and outreach.

### Relationship Between Experimentation and Risk Taking

*Experimentation.* Students described experimentation as an active process of figuring out who they are and what they are capable of through making intentional and deliberate decisions. For instance, Alexis said, "you have to experiment to find out who you are, and what you like. It's like as little as trying new foods to whether or not you want to sleep around." These emerging adults described a process of experimentation consistent with the process

of decision making about risky behavior described by Furby and Beyth-Marom (1992). They described being motivated to experiment by a desire to test their limits, both their personal limits and the limits of the behavior.

Emerging adults described experimenting with a variety of different behaviors. Many students described starting to question the religious beliefs their parents raised them with and having the opportunity in college to experiment with other religions through coursework. Next, students described meeting new people, more specifically meeting people different from them. For instance, a few students mentioned that dating someone of a different race was a form of experimentation. Through experimentation, they could learn about others and have their stereotypes debunked, not only stereotypes based on race or ethnicity but also on sexual orientation, or stereotypes based on whether someone grew up in a city or on a farm. Students also talked about experimenting with taking different classes and with extracurricular activities, such as joining a new club or trying a new sport.

In addition, the overwhelming majority of students mentioned substance use, alcohol use, or sexual activity. Ben described experimenting with alcohol: "I think it's important for people to test alcohol out. You know part of that is you're gonna get sick sometimes but hopefully that's in the beginning stages and you learn from that."

*Risk taking.* Students defined risk taking as intentional and functional behavior. They described a deliberate process of trial and error, taking a chance, or a risk, to see what would happen. Many of these emerging adults were unclear about whether the risk was the behavior, and, as such, certain behaviors were inherently risky, or whether the risk was the outcome, and a behavior could not be defined as risk taking until after experiencing the outcome. Nearly every student described risk taking based on the outcome. For instance, Gabriel, a substance user, believed drugs were not inherently risky and noted that whether an individual views them as risky is dependent on the outcome.

If people value their body as a temple, then taking drugs is a risk because you're harming your body. If you see your body as just a vessel that you're in then it's not really risky, then it's just experimentation, how much can you do to this vessel before it collapses.

Consequently, whether emerging adults choose to take a risk is based on their understanding of the potential outcomes, their assessment of the probability of the outcomes, the personal value of the outcomes, and whether they see themselves as vulnerable to experiencing the outcomes, regardless of the

probability that each will actually occur. This is consistent with past research (Beyth-Marom & Fischhoff, 1997; Fischhoff, Lichtenstein, Slovic, Derby, & Keeney, 1981; Furby & Beyth-Marom, 1992). Individuals are willing to risk different things and see themselves as more or less vulnerable to actually experiencing those outcomes. As Jacob said, "the risk is defined by what you view as acceptable."

Consistent with this, when asked to identify behaviors they viewed as risk taking, there was a huge range in students' responses. The most frequently mentioned behaviors were applying for a job, drinking to excess, drunk driving, drag racing, unprotected sexual activity, stealing, and certain drugs, with only three to six out of 32 emerging adults mentioning each.

*Risk taking as a form of experimentation.* After considering experimentation and risk taking independently, students were asked to discuss the relationship between the two. Students offered three possible relationships: experimentation and risk taking are the same, experimentation and risk taking are opposite ends of one continuum, and experimentation and risk taking are two separate constructs. When describing the first scenario, which was only endorsed by four students, students discussed that there are many similarities between experimentation and risk taking. Perhaps most importantly, both are functional and intentional behaviors. For instance, emerging adults described a similar process for assessing the outcome of experimentation and risk-taking behaviors. Dalila described her impressions of the similarities between experimentation and risk taking.

With experimenting you're trying to see if it's gonna work or not, and that's what you're doing with risk taking. And they both do have side effects. . . . I think they go hand in hand because when you take a risk or when you experiment, you're gonna find out a solution that's good or bad.

In the second scenario, in which experimentation and risk taking are opposite ends of one continuum, which again was only supported by four students, the intensity of the behavior determines whether a behavior is experimentation or risk taking. Although unable to identify the point at which behaviors become dangerous, students were clear that an acceptable risk reaches a threshold at which point it becomes dangerous. For instance, Amanda said,

I think there's a point to where you're experimenting, like . . . if it's your first time drinking . . . I think that that's when you're experimenting, but after awhile it just becomes risk taking . . . you know whether you like it. . . . I think there is a point to where it kind of switches over . . . you're just plain taking a risk.

In this example, casual drinking might be experimentation, whereas habitual drinking would be risk taking.

The final relationship, that experimentation and risk taking are unique constructs, earned the most endorsement from students. This relationship suggests that a behavior could be experimentation, it could be risk taking, or it could be both. Therefore, although they are two unique constructs, they are not mutually exclusive categories. Gabriel explained this well when he said,

You can experiment with something and it can also be a risk, just as you can take a risk which might be an experiment. But you can also do an experiment that has no risk to it, and you can also take risks that aren't experiments. So I mean, I think they're sort of interrelated, but they don't have to be.

When discussing experimentation and risk taking as two separate constructs, emerging adults distinguished between them in two ways. They described a public distinction and a personal distinction. The public distinction lies in other's perceptions, particularly the perceptions of parents and other adult authority figures, of what emerging adults do and the connotation of the language used by the general public to describe emerging adult behavior. From this perspective, risk-taking behaviors are most often functionally irrelevant. The personal distinction, or how emerging adults understand their experimentation, will be highlighted here.

The primary distinction between experimentation and risk taking articulated by emerging adults was in the process. Experimentation was described as a learning process, a process designed to achieve a goal. Risk taking was more likely to be spontaneous and motivated by a desire to be challenged. Participants described risk taking as inherently more dangerous.

Students also described the personal distinction as being influenced by their knowledge and preparation before participating in a given behavior, including whether they were aware of the potential consequences and whether they took precautions to avoid a negative outcome. With experimentation, emerging adults described being more prepared and taking precautions to avoid undesirable outcomes. They described risk taking as less likely to be planned. And some emerging adults explained that whether a behavior was experimentation or risk taking was determined simply by their personal values and how they felt about the behavior.

In these descriptions, students explained that there is something about college that is conducive to and encourages, or perhaps even facilitates, experimentation in a way that other contexts do not. To gain a better understanding of this, students were asked to describe "what is it about college that encourages experimentation." In their explanations, students spontaneously pro-

duced the phrase *college culture*. They were then asked to describe the college culture.

### College Culture

Students' descriptions of the college culture were consistent with the image of college portrayed in the media and described by Sperber (2000): students struggling academically, all night parties that include drinking alcohol, promiscuous sex, and drug use. For example, Paul said, "I hear college student, I think, alright this guy drinks every weekend, keeps a 2.5 maybe." And many emerging adults described entering college with the expectation that their experiences were going to be consistent with this image. Stacey, a community college student, described her expectations: "You're supposed to drink, and you're supposed to listen to Dave Mathews Band. . . . It's just the rule when you're in college." Students described the college culture as providing them with the free time and opportunity to experiment with what it meant to be independent from their parents, including questioning the things their parents had always told them. Alexis described this experience:

You have adolescents, and they're all trying to figure out who they are, and they're all saying, well my parents said this was wrong, well really is it? Everything comes into question. Is it really wrong to smoke pot? Is it really wrong to sleep around? Is it really wrong to swear?

Community college students who were still living at home described maintaining much more contact with their families and, therefore, being more influenced by their parents' beliefs or at least feeling obligated to respect their parents' beliefs while they were still living with them.

Both university and community college students explained that many things contribute to college students' high rates of participation in risk behaviors, such as drinking alcohol, using substances, and sexual activity. Emerging adults said that participation in risk behaviors and the development of a college culture was most influenced by independence and living away from their parents, or at least spending significantly more time away from their parents. Most students reported having few real world responsibilities. For example, most said they were not financially independent from their parents, thus, they did not have to worry about budgeting their money between leisure activities, such as buying alcohol and paying their bills. Emerging adults described college as an environment in which they were responsible for making their own decisions, relatively unburdened by real world responsibilities,

surrounded by other young people making the same decisions. For example, Jacob, a university student said,

There's a carefree attitude experiencing college . . . my friends and I refer to as the safety bubble of school, you can do whatever you want. You can get up at 8 in the morning and drink for a football game, you're not an alcoholic, you're a party animal. But if you do that in the real world, then you'll go to treatment.

Most students expressed this same sentiment, that there were few or no consequences to their behaviors. This is consistent with past research, which has found that the majority of young people do not experience negative consequences as a result of participating in risky behaviors (Arnett, 1991).

Another important contributor to the development of the college culture described by these young people was the college environment. They defined the college environment to include the opportunities for experimentation that were available and the array of new experiences, people, and ideas to which students were exposed. Alexis, a community college student, described how she felt the college environment contributed to the college culture.

You stick 36,000 students who are basically between the ages of 18 and 25 together, without parents . . . they're on their own for the first time, they're all going to school . . . when you shove all of these people in a small area, I think it's gonna develop a culture of its own, and I think that would be the weekend ritual of getting dressed up and going out and getting blitzed [drunk] or going dancing or finding a guy to sleep with. Not everybody does it, but a lot of people do. It's kind of more acceptable.

As highlighted by Alexis, college students are surrounded by opportunity, with plenty of free time to act on those opportunities. This represents one extreme of how students described their experiences.

At the other extreme, students described adamantly opposing the stereotypical college culture and working hard to not behave in ways consistent with that image. The group of emerging adults in the middle described behaving with moderation, refusing to accept the college culture without experiencing it for themselves. They described a process of negotiating the image of the college student and figuring out how that fit into their developing sense of self. For example, Jacob, a university student, said,

The first thing I saw was a frat house, with girls in bikinis and guys throwing beer cans at cars, and I was like, this place is gonna be awesome. That was my idea of school then. . . . All these beautiful girls who are just willing to have sex on a drop of a dime. . . . I opted to change that rather quickly. I didn't find it to be as rewarding as most people think. . . . It kind of lured me away from the stereo-

typical idea of fun, kinda made hanging out and relaxing with a smaller group of people who you really value as your friends . . . much more important.

Negotiating where they fit into the college culture might be seen as one part of the larger process of finding their niche in society. For instance, Amina said, "I think the whole time in college it's just about learning about yourself and then learning about things that are interesting to you, just exploring the different parts of your identity or interests."

*Moratorium and the college culture.* Emerging adults' descriptions of the college culture suggest that although they believed that they would be actively experimenting throughout their lives to constantly refine who they are, rates of experimentation are particularly high throughout college. For instance, Stacey said,

Right now, you're just kinda in between. You're about to be on your own, where you have to decide everything for yourself. I think before I make those decisions without anything to back me up, I think right now is a good time to kind of figure all that stuff out before I get more into a job and a family and things like that.

This period of active exploration described by students is consistent with Erikson's (1959, 1965, 1968) description of the period of moratorium, a period characterized by change and transition during which individuals search for their niche in society. Moratorium is characterized by experimentation and learning about oneself to move closer to a stable identity. In moratorium, young people experiment with many different things that facilitate learning about self, including learning their limits; learning how things affect them; learning about others; learning about society and social norms; learning facts, skills, and information; and gaining experiences to use for future reference (Erikson, 1959; Grotevant, 1992).

Emerging adulthood, characterized as a period of moratorium for many young people, may be the most intense time of life. Young people have survived the dependence associated with adolescence, but having not yet earned all of the responsibilities of adulthood (Arnett, 2000). During this transition, young people approach the adult world and work toward accepting an introductory adult identity, making commitments to interpersonal relationships and occupational undertakings, and identifying a value system that is consistent with both self and society (Hauser & Greene, 1991).

When asked whether they felt they were "in a period of active exploration to figure out who you are," overwhelmingly, students reported they were. In the interview, 25 students said they were definitely in a period of active explo-

ration, four students said "sort of," two students said they were not exploring but their responses suggested otherwise, and one student was not asked because he had to end the interview early to keep a prior commitment. In the interview, all students described extremely high rates of trying new things, evidence they were actively involved in this process of exploration. In the questionnaire, 77% of all emerging adults reported having changed peer groups, 91% joined or quit an activity, 75% began or ended an intimate relationship, and 81% changed fashion, at least once in the past year, indications of being in moratorium.

This group of emerging adults attributed their high rates of experimentation to two primary transitions: the transition out of high school and into college and the transition to greater independence. What they described as most meaningful about the transition from high school to college was that it was a transition to a new environment. Data revealed that the intensity of this experience varied by whether they moved away from home, how far they moved, and how different the new location was. These emerging adults explained that a new environment provided access to many new opportunities, experiences, behaviors, ideas, options, and people who provided access to many of these opportunities. Because the majority of the community college students were still living at home or in their hometown, they described having access to different experiences than university students. They had access to fewer extracurricular activities, but to a student body that was more diverse in terms of age and life stage. This group of community college students described being more committed to their education than the university students and was more certain about their career goals.

The second major transition described was increased independence. The development of independence was greatly affected by the factors just described. Regardless of whether students continued to live at home or moved away, they described spending significantly more time away from their parents and, thus, felt they had more responsibility for making their own decisions.

Emerging adults' descriptions of being in moratorium and actively working to figure out who they are serves as further support for the contention that experimentation is intentional and functional behavior, which is developmentally appropriate for college students.

## IMPLICATIONS

This study focused on the ways emerging adults in college view risk behavior as a form of developmentally appropriate experimentation, providing many implications for research and for outreach.

### Implications for Research

These data provide a foundation for future research in numerous ways. First, these students did not identify themselves as risk takers. They identified themselves as experimenters. This suggests that it may be more effective to talk with emerging adults about experimentation rather than a continued focus on risk taking. However, the use of the word experimentation may have confounded the process of data collection. The word experimentation connotes a systematic scientific process. Consequently, some students may have been defining the word *experimentation* rather than describing how they viewed their experiences with experimentation.

Second, students made a distinction between behavioral extremes, suggesting that consistent with the findings of other researchers, emerging adults do not view their activities as inherently risky (Graber & Brooks-Gunn, 1995; Jessor, 1987).

Third, college students' descriptions suggest that research needs to study a variety of behaviors to identify healthy experimentation behaviors that are functionally equivalent to dangerous risk taking behaviors and would, therefore, help emerging adults avoid negative consequences from risk behaviors (Silbereisen et al., 1987; Silbereisen & Reitzle, 1991). Research needs to work toward identifying the point in the process of experimentation at which participation in these behaviors becomes dangerous, the point at which the potential for negative outcomes greatly increases, and the point at which participation in dangerous behaviors becomes habitual.

### Implications for Outreach

The challenge of outreach becomes evident very quickly when talking with college students about experimentation and risk taking. These students defined behaviors as dangerous based on the outcome. If a behavior cannot be identified as dangerous until after a negative outcome has been experienced, how can prevention efforts aimed at identifying and avoiding dangerous risk taking be successful? Although there is still a tremendous amount of research to be conducted, these data are critical for a new approach to outreach.

Outreach efforts that have focused on prevention and intervention typically target the minority of youth who are inexperienced risk takers or experimenters and the minority of youth experiencing real crisis. However, there is a large, often neglected number of youth in a middle group, a group described as experimenters (Shedler & Block, 1990) who experiment with a variety of behaviors and often demonstrate optimal outcomes but could experience cri-

sis. Identifying the process of experimentation and the functions that experimentation behaviors serve, outreach efforts can begin to target experimenters and work to redirect youth behaviors, provide youth with alternatives to dangerous behavior, encourage youth to take precautions when participating in potentially dangerous behaviors, and prevent youth from experiencing real crisis.

Preventing participation in dangerous risk taking might also be achieved by promoting positive behaviors. Rather than trying to directly prevent youth substance use, an alternative approach would be to promote social activities that do not involve substance but fulfill the same needs of young people and thereby eliminate the need for substances, what others have referred to as functionally equivalent behaviors (Silbereisen & Reitzle, 1991). Jason, a heavy drug user, said,

I think they're [drugs] important because it has added beneficial aspect, but if I had to do without and was said, okay you just have to party without drugs and without alcohol, that wouldn't be a big deal because . . . it's not really a focus, it's just something we do.

Thus, outreach efforts might be directed toward strengthening and promoting healthy experimentation and risk taking and responsible decision making rather than only working to prevent youth participation in dangerous risk taking. Students supported this. Josh, who had been a heavy substance and alcohol user, described changing his activities:

I still take risks. I just changed it. I do more [rock] climbing and stuff like that. . . . I always like that sense of danger a little bit, that risk to take, but I just do it in other ways.

### LIMITATIONS AND FUTURE DIRECTIONS

Although the present investigation begins to elucidate the process of experimentation for emerging adults in college, this study is limited. First, these students represent volunteers from one large public university and one community college, both in the same midwestern town. It is also cautioned that these results not be generalized to the experiences of emerging adults who do not attend college, the "forgotten half" ("The Forgotten Half," 1988), or to younger youth. Second, although the sample was relatively diverse in terms of gender and race and ethnicity, the small sample size does not allow for analyses within or between groups. Future research should explore experimentation from the perspective of different populations and should explore

gender, racial and ethnic, and socioeconomic differences in young people's experiences with both healthy experimentation and dangerous risk taking. Quantitative measures are needed to survey much larger samples of young people to better understand their experiences with experimentation and risk taking. Third, although most students were describing behaviors that they were still participating in, hindsight self-report may have distorted their understanding of their experiences. Future research might work to capture young peoples' experiences, when they are in the moment, so to speak.

### CONCLUSION

The concept of experimentation as distinct from risk taking was salient for nearly every student interviewed. Although researchers (e.g., Baumrind, 1985; Jessor & Jessor, 1977; Maggs et al., 1995) have suggested a definition of experimentation as functional and intentional, the present results contribute the emerging adult perspective to this definition. Students were able to articulate the relationship between experimentation and risk taking and distinguish between functional experimentation and dangerous risk taking. They situated experimentation in the college culture, an environment resulting from increased independence and spending less time with their parents.

Overwhelmingly, this group of emerging adults described their experiments as successful, even the decisions that might have had an undesirable outcome. The majority agreed that "I wouldn't change anything . . . because it's a learning experience." With each behavior providing emerging adults with opportunities for learning and growth, perhaps emerging adults need to experiment with a variety of behaviors to gain the full array of skills necessary for adult life. Mark said, "I think if you want to learn a really good lesson, the best way to learn it is by experiencing it and knowing first hand that I can't do that or else such and such will happen." Students' ability to articulate their process of experimentation is extremely valuable, and their words have many implications for research and for outreach.

### APPENDIX PARTIAL INTERVIEW GUIDE

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Today, I would like to hear about your experiences of trying things as you work to figure out who you are. This might include clothes, activities, alcohol, drugs, driving, art, poetry, friendships, intimate relationships, sexuality and anything else, whether it is legal or illegal. I want this to be a casual conversation, and I want to hear your

opinions and your stories. My goal is to develop a more realistic definition and understanding of young adults' experiences.

1. What new behaviors have you tried since starting college?
2. How do you think you have changed since starting college?
3. How would you describe yourself?
4. What sorts of things do you do to help you figure out who you are?

A. I would like to start off by talking specifically about your experiences with these behaviors. (I will go through the following questions for one or two of the behaviors identified above. In the first few interviews, I will ask which behavior they would like to talk about. As I conduct more interviews, I may choose which behaviors we discuss to ensure a diversity of behaviors.)

1. What are the different reasons that you do [the behavior]?
2. What, if anything, is dangerous or risky about this?
3. What, if anything, is safe or positive about this?
4. How likely are these outcomes?
5. How important are the risks to you?
6. How important are the positive things to you?
7. What do you learn about yourself from this experience?
8. What do you learn about others from this experience?
9. How does it help you grow as a person?
10. How does it help you develop your sense of self?
11. How do you feel about yourself when you do it?
12. How do you feel about yourself afterwards?
13. Would you make the same decision again? Why or why not?
14. Would you recommend this behavior to someone else? Why or why not?
15. What do you tell people about it?
16. What would your parents or guardians think about it?
17. How does being X (gender, race or ethnicity, social class, religion) influence what you do or how you feel about it?

#### B. Application

1. How do you decide if a behavior is too dangerous or too risky?
2. How do your friends or peers make this distinction?

C. I'm interested in how you define experimentation and risk taking.

1. How do you define experimentation?
2. What things do people do that count as experimenting?
3. How do you define risk taking?
4. What things do people do that count as risk taking?

5. Do the reasons you would experiment differ from the reasons you might take risks?
6. Can you give some specific examples?
7. Talk about the similarities and differences between risk taking and experimentation.
8. How does being X (gender, race or ethnicity, social class, religion) influence how you think about experimentation or risk taking?

#### Moratorium

1. Some people believe that college students are in a period of active experimentation as they work to figure out who they are. Tell me about how this does or does not describe you right now.
  2. What is it about college that allows you to do that?
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