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Innovations in Research and Scholarship Features

The Importance of College Roommate Relationships: A Review and Systemic Conceptualization

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This article reviews empirical studies of the role of college roommate relationships in students' mental health and college adjustment. We propose a systemic conceptualization of roommate relationships that highlights roommates' interdependence and origins of roommate relationship dynamics. We discuss practice implications for student affairs professionals, provide a case example, and offer recommendations for future research.

Forty-one percent of Americans between ages 18 to 24 are currently enrolled as undergraduate students (U.S. Department of Education, 2012). For those 21 million traditional-aged students, the college years represent a developmentally critical time period. Several major psychological theorists emphasize the importance of social functioning during these years. Erikson's (1968) stage theory of psychosocial development asserts that young adults' primary objective is to experience intimacy in relationships rather than isolation. Cultivating mature interpersonal relationships is one of Chickering and Reisser's (1993) seven vectors of psychosocial developmental issues that college students face. Lastly, traditional-aged college students fall within Arnett's (2000) emerging adulthood stage that is characterized by prolonged identity formation and is closely tied to romantic relationships and friendships (Barry, Madsen, Nelson, Carroll, & Badger, 2009). In sum, for millions of college students, interpersonal relationships are essential to psychological development.

The theoretical importance of interpersonal relationships for college students is supported by empirical studies linking social functioning to mental health and adjustment to college life. Students' ability to form meaningful relationships with other students leads to gains in multiple dimensions of psychological well-being, including environmental mastery, personal growth, purpose in life, and self-acceptance (Bowman, 2010). The quality of new college friendships predicts

Sarah E. Erb, Doctoral Candidate, George Mason University. Keith D. Renshaw, Associate Professor, Department of Psychology, George Mason University. Jerome L. Short, Associate Professor, Psychology, George Mason University. Jeffrey W. Pollard, Affiliate Professor of Psychology, George Mason University. Correspondence concerning this article should be addressed to Erb at serb@gmu.edu. how well students adjust to interpersonal experiences at college, their feelings of attachment to a university, and their coping with academic demands (e.g., Buote et al., 2007). Students' ability to develop quality friendships at college predicts decreases in both internalizing and externalizing problem behaviors (Pittman & Richmond, 2008). Though these studies conclude that forming and maintaining social relationships are key developmental tasks, little is known about the roles of specific types of social relationships, such as roommate relationships.

Importance of College Students' Roommate Relationships

College roommate relationships can be an important aspect of students' social functioning and college life for several reasons. First, roommates are a specific type of interpersonal relationship *widely* and *uniquely* experienced by college students. In a study of 23,518 undergraduates from 44 U.S. campuses, 40% reported living on campus: in campus residence halls, fraternity or sorority houses, or other university housing (American College Health Association, 2012). Aggregate percentages may mask the fact that the portion of undergraduates living on campus varies considerably. Some universities, such as Princeton, have approximately 97% of undergraduates living on-campus (Wecker, 2011). This review focuses more on studies of on-campus, instead of off-campus, roommate relationships because we later recommend how student affairs professionals can use research findings to help create positive roommate relationships.

College roommate relationships are unique among students' interpersonal relationships because they live together. Roommates have frequent contact, negotiation of responsibilities, and compromises about the living environment (e.g., noise level, sleep/waking hours, visitors, and decor). Students' roommates are typically the first nonfamily members and first people of equal status (i.e., in contrast to a parent-child relationship) with whom they live. These "firsts" bring added challenges to students' abilities to get along with one another.

Unlike students' other friendships, they often do not choose roommates and may experience personality mismatches. In a sample of 31,500 students in a nationwide survey, 50.1% of women and 44.1% of men reported "frequent" or "occasional" conflict with roommates or housemates (Liu, Sharkness, & Pryor, 2008). In a nationwide survey, 5.6% of undergraduates reported that roommate difficulties hindered their academic performance (e.g., received a lower grade on an exam, received an incomplete, or dropped a course), which is more than the 4.0% of students who said that alcohol use did the same (American College Health Association, 2012). Roommate conflict is a widespread experience among college students.

Despite the presence of college roommate relationship studies over several decades, no literature reviews summarize and synthesize the empirical knowledge about roommate relationships. This article does so in order to achieve several objectives. First, we critically examine the findings and quality of previous studies. Next, we utilize family systems theory to organize the empirical knowledge of roommate relationships and provide an overarching conceptualization. We then describe practical implications for student affairs professionals with a case example that highlights key points. Finally, we make recommendations for future research that can help address specific gaps with more targeted and methodologically rigorous research. Overall, we address the following questions:

- 1. What is the role of roommate relationships in students' mental health and college adjustment?
- 2. Where may relational dynamics between roommates originate?
- 3. How can student affairs professionals, such as college counseling center and residence life staff, use the proposed conceptualization to enhance roommate relationships, particularly when conflict arises?

4. What future research on roommate relationships is needed to inform future effective practices?

The studies included in the present review examined how aspects of undergraduate roommate relationships related to mental health outcomes and students' adjustment to college life. We identified relevant peer-reviewed journal articles by first searching PsycINFO and Google Scholar, using the following search term combinations: "undergraduate" and "roommate," "college" and "roommate," and "roommate" and "relationships." Several journals not indexed in PsycINFO were searched individually, including the *Journal of Student Affairs Research and Practice*, the *Journal of College and University Student Housing*, and the *Journal of College Student Development*. The 10 most relevant studies are summarized in Table 1.

Table 1

Study	Population	Findings	
Quantitative Empirical Studies Linking CR Relationships to Important Outcomes			
Waldo & Fuhriman, 1981	19 pairs of on-campus CR at a large Mid- western university (94% female)	CRs who rated themselves as having the highest level of trust and intimacy within their relationship rated themselves as having significantly higher overall emo- tional adjustment	
Waldo, 1984	138 students at a large East Coast univer- sity (75 men)	Use of positive CR communication skills was significantly associated with more positive overall psychological adjust- ment	
Waldo, 1986	Same sample as Waldo, 1984	Positive CR communication skills and higher quality CR relationship were both associated with higher GPA and greater retention	
Lepore, 1992	228 students (122 female), mostly under- graduates (93%)	Demonstrated that a supportive room- mate relationship can exert a cross- domain buffering effect of social support	
Dusselier, Dunn, Wang, Shel- ley, & Whalen, 2005	416 residence hall students at a Mid- western university (57% men)	Frequent conflict with CR was significant predictor of overall stress level	
Qualitative Studies of CR			
Keup, 2007	8 high school seniors (6 females), inter- viewed individually over 3 time points (2 of which were during their first year of college)	Difficulty with CR relationships was among the greatest disappointments of the first year; and CR difficulties had a negative effect on overall satisfaction	
Bradbury & Mather, 2009	9 first-generation students (7 females), interviewed individually twice during first year of college	3 of the 4 participants who lived on campus had difficulties with their CRs; 1 participant's roommate problems was a factor in her decision to transfer to another university	

Literature Review of College Roommate (CR) Relationships

Table 1 (continued)

Literature Review of College Roommate (CR) Relationships

Study	Population	Findings
Jaggers & Iverson, 2012	23 Black males at a predominantly White university who participated in 3 focus groups	Frequent roommate conflicts, negative racial stereotypes, interracial tensions, and disagreements with residence hall staff about unevenly applied disciplinary actions compared to White students
Studies of CR Interdependen	ce	
Anderson, Keltner, & John, 2003	37 pairs of on-campus roommates at a large Midwestern university	Demonstrated emotional convergence (specifically, greater similarity in their emotional experience and expression) over time among CR using dyadic data analysis techniques
Haeffel & Hames, 2014	103 pairs of randomly assigned first-year students CR (66 female pairs) at a pri- vate, midsized Midwestern university	Used dyadic data analysis techniques to demonstrate that cognitive vulnerability to depression (specifically, a rumina- tive response style) can be "contagious" among CRs

Roommate Relationships as Protective or Risk Factors for Adjustment

Given the multiple ways in which roommates can interact, it is not surprising that empirical evidence suggests these relationships can enhance or reduce mental health and adjustment to college. Several studies demonstrate that positive roommate relationships may help protect them from psychological distress. In an early study of students in a large Midwestern university, five pairs of on-campus roommate participants who scored highest on a measure of trust and intimacy within their relationship, as compared with the five pairs with the lowest scores, rated themselves as having significantly higher emotional adjustment than the second group (Waldo & Fuhriman, 1981). The small sample limits generalization, but the study indicated the potential value of supportive roommate relationships.

In a larger study of 138 students from an east coast university, raters assessed students' use of positive communication skills during hypothetical situations with roommates and found that the skills were significantly associated with positive overall psychological adjustment (Waldo, 1984). In a follow-up study of 127 of these participants, positive roommate communication skills and self-reports of higher quality relationships with roommates were each significantly associated with higher GPA and greater retention, as indicated by their registration the following semester (Waldo, 1986). The design and data analysis techniques in these studies did not account for interdependence that may exist between roommate relationships may have longer-term benefits for students' psychological and academic functioning.

Other studies provide evidence for roommate relationships' role as a protective factor for student mental health. A study of 228 students showed that high levels of social support from roommates 2 weeks after moving in together weakened the association between conflict within general friendships (also assessed 2 weeks after move-in) and psychological distress 7 weeks later, even after adjusting for the effects of baseline psychological distress (Lepore, 1992). The participants lived with their roommates in off-campus apartments, which may create different expectations than traditional on-campus housing.

Some studies suggest that roommate relationships can be a risk factor for mental health problems and poor adjustment to college. In a study of 416 students in residence halls at a Midwestern university, frequent conflict with one's roommate was a significant predictor of overall stress level (Dusselier, Dunn, Wang, Shelley, & Whalen, 2005). Students described their roommate conflict in open-ended responses and mentioned annoyance at their roommates' habits, such as coming home late and waking them.

Qualitative studies of students generally have small samples and the findings have limited generalizability, but they can provide more detailed descriptions of negative processes within roommate interactions. In a longitudinal study of eight high school students' idealized expectations of college life and their subsequent disillusionment, difficulties with roommate relationships were among the greatest disappointments of the first year and had a negative impact on students' overall satisfaction (Keup, 2007). Interviews of nine first-generation Appalachian college students found that students maintained more family responsibilities, spent minimal time with roommates, and had trouble adjusting to roommates from different family backgrounds (Bradbury & Mather, 2009). In a focus group study of 23 Black undergraduate men at a predominantly White university in the Midwest, students reported numerous experiences of roommate conflicts, interracial tensions, and disagreements with residence hall staff (Jaggers & Iverson, 2012). The students also reported interactions with roommates and staff that included negative racial stereotypes, unevenly applied disciplinary actions, and lack of support.

The small samples and overall dearth of empirical research on college roommate relationships limits the ability of counseling center staff, residence life professionals, and others in the college community to conceptualize roommate relationships with empirical grounding. The lack of a thorough conceptualization of roommate relationships limits theoretically informed research regarding *how* interpersonal dynamics between roommates develop, and the function that roommates serve in students' adjustment to college and mental health. To begin to address this need, the following section examines family systems theory and proposes a theoretically informed, empirically testable conceptualization of college roommate relationships.

Roommate Relationship Conceptualization Using Family Systems Theory

Family systems theory emerged in the mid-twentieth century as an outgrowth of general systems theory, present in the fields of biology, physics, and chemistry (Doherty & McDaniel, 2010). Systems theory examines relationships between parts, and posits that a system is not simply the sum of its parts. Family systems theory asserts that one family member's functioning influences and is influenced by interactions within various family relationships (Doherty & McDaniel, 2010). An example is that children of depressed parents are at higher risk for a variety of behavior problems and psychological symptoms than children whose parents are not depressed (Cummings & Davies, 1994). Family systems theory posits that subsystems within the family (e.g., dyadic relationships) influence other subsystems and overall family functioning. Intense closeness between mothers and adolescents predicts a higher likelihood of marital separation, whereas closeness between fathers and younger children has a more positive impact on the husband-wife relationship, and predicts a lower likelihood of marital separation (Schindler & Coley, 2012). By conceptualizing individuals through their experiences within the greater family system of interactions among various indi-

viduals or subgroups, family systems theory emphasizes the interdependence of individual family members.

Family systems researchers have grappled with how to best account for the nonindependence between family members in their research designs and statistical analyses (Fisher, 1982). Many researchers have criticized the averaging of family members' scores to represent a summary of the family, rather than taking into account the individual contributions of each person's scores (Handel, 1997). One approach to address the interdependence of family members is the actor-partner interdependence model (APIM) that allows one to empirically test associations within and between dyads (Cook & Kenny, 2005; Rayens & Svavarsdottir, 2003). Researchers can examine both the extent to which a family member's score on an independent variable of interest affects his or her own score on an outcome (i.e., an actor effect) and on another family member's outcome score (i.e., the partner effect). Researchers can then examine how both actor and partner effects from a dyad within a family system affect overall family outcomes (Rayens & Svavarsdottir, 2003).

Application of Family Systems Theory to Roommate Relationships

Family systems theory is well-suited to the conceptualization of college roommate relationships because of characteristics they share in common with families. Koerner and Fitzpatrick (2004) have identified three primary definitional features of families: structural (presence of family members), functional (accomplishing psychosocial tasks such as maintaining a household, socializing children, and providing emotional and material support), and transactional (groups of intimates that develop a family identity and experience a history and a future). Research indicates that laypeople have broadened their concepts of families to include many intimate relationships, such as biological parents with children, extended families, stepfamilies, blended families, and unmarried cohabiting heterosexual and same-sex couples with, or without, children (Weigel, 2008). College roommates live together, maintain a living space, and share experiences that accumulate over time. They may also provide emotional and material support and plan future activities together. Frequent contact and shared experiences necessitate communication and problem-solving. There are, however, clear differences in college roommate and family systems. College roommates are usually unrelated biologically, have minimal or no shared history, and do not include parent-child hierarchies. The similarities that exist, however, suggest family systems theory is applicable to many aspects of college roommate relationships.

A systemic conceptualization of roommate relationships posits that students' outcomes (e.g., mental health and adjustment to college) are influenced by one another, and are interdependent. There is some empirical support for this assertion. Anderson, Keltner, and John (2003) conducted a study of 37 same-sex pairs of on-campus roommates at a large Midwestern university. These roommates were assessed after living together for 2 weeks and again after 9 months at the end of the school year. Correlations of roommates' emotional expressiveness after 9 months were significantly larger than those after 2 weeks, which demonstrated emotional convergence (i.e., significant increases in similarity of emotional expressiveness) among both male and female pairs of roommates (Anderson et al., 2003). Haeffel and Hames (2014) conducted a similar study with 103 pairs of randomly assigned freshman roommates at a selective, private, Midwestern university. Results indicated that participants whose roommate had a ruminative response style (i.e., a cognitive vulnerability to depression that involves a tendency to focus attention on one's negative mood) were more likely to also develop higher levels of cognitive vulnerability over 3- and 6-month intervals (Haeffel & Hames, 2014). These studies were particularly informative as they collected data from

both roommates and used data analysis techniques that accounted for the interdependence of roommates' functioning.

Family systems research can assist our conceptualization of college roommate systems by providing explanations for *where* interpersonal dynamics among roommates originate: their family of origin. There is evidence that family of origin functioning affects college students' social and psychological functioning. In a study conducted at a large public southern university, 17 students from dysfunctional family of origin environments (either disengaged or enmeshed) and 21 students from positively functioning family of origin environments (balanced in cohesion and flexibility) roleplayed interpersonal conflict scenarios (Larkin, Frazer, & Wheat, 2011). Both male and female students from dysfunctional family environments exhibited significantly more negative, and less positive, verbal behaviors than students from positively functioning environments (Larkin et al., 2011). In a study of 208 upperclassmen from a Midwestern university, students' ratings of the overall functioning of their family during their upbringing significantly predicted the quality of their friendships at college (Wise & King, 2008). A study of 320 students from a public Northeastern university found that students from less emotionally expressive families more often used avoidant emotional coping and had more difficulty adjusting to college than students from more expressive families (Johnson, Gans, Kerr, & LaValle, 2010). Although these studies did not focus on roommate relationships, the findings are consistent with the notion that dysfunction within families of origin may be associated with dysfunction within roommate relationships.

The hypothesis about the connection between families of origin and roommate relationships is similar to a core component of systemic family theory: the intergenerational transmission of interpersonal patterns. This concept posits that family patterns and styles of interactions tend to be "passed down" from one generation to the next (Bowen, 1978; Harvey, Curry, & Bray, 1991). For example, children's exposure to interpersonal aggression and abuse, conflict and divorce, parenting styles, and communication patterns within their families of origin increases their likelihood of reenacting these dynamics within their future families as adults (e.g., Serbin & Karp, 2004). Through modeling, families may teach children behaviors for interacting within family systems and act as socializing agents. The degree of emotional expressiveness within college students' families of origin predicts their style of emotional expression and skill in communication when discussing topics that are personally meaningful to them (Halberstadt, 1986). Given that college roommate relationships may act as the first interpersonal system students live within after leaving their family of origin, a fuller conceptualization of roommate relationships should account for the likelihood that students' families of origin influence how roommate systems function.

Family systems theory is applicable to a conceptualization of college roommate relationships for three main reasons. First, groups of roommates are interpersonal systems that, like families, consist of varying numbers of individuals who live together and share similar challenges (e.g., negotiating expectations of one another). Second, like family members, roommates' outcomes (e.g., mental health and adjustment to college) may be interdependent with one another. Lastly, students may bring familiar relational patterns from their families of origin with them into their roommate relationships. A systemic perspective of roommate relationships helps explain *how* such relationships develop over time (interdependently) and *where* dynamics among roommates originate (their family of origin).

Translations of Theory to Practice in Student Affairs Settings

In accordance with calls for increased translation of theory to practice within the student affairs community (e.g., Reason & Kimball, 2012), we next provide examples of potential appli-

cations of the proposed roommate relationship conceptualization. These applications are geared toward counseling center and residence life professionals, as they are in unique positions to utilize a family systems perspective to guide their work with students on roommate-related issues. To illustrate how a systemic conceptualization of roommate relationships could inform college counseling center clinicians' treatment plans, we use a case example, followed by explanations for how residence life professionals can consider roommates' interdependence when designing interventions.

Clinical Applications and a Case Example

The following case example, which represents an amalgam of clients seen by the first author, is presented as an example of how the systemic conceptualization of roommate relationships can inform techniques used by counseling center professionals. Molly is an undergraduate in the first semester of college who presents as a new therapy client to her college counseling center. She was referred by the resident assistant (RA) of her residence hall, after several meetings in which Molly's RA attempted to provide her with support for her depression and homesickness, and her difficulties asserting herself with her roommate, Beth. During this first session, Molly tearfully revealed feelings of worthlessness, lack of energy, insomnia, and bouts of crying. She explained that the transition to college has been difficult without her parents helping her make day-to-day decisions. Molly said that when she shared her feelings with Beth, she felt dismissed emotionally, and later overheard Beth calling her a "baby" when talking to their hall mates. Molly connected her low mood to her inability to assertively negotiate room duties with Beth. Molly sadly admitted that she has struggled with these types of interpersonal patterns all her life.

Molly agreed that the counselor could consult both Beth and her RA. During a subsequent phone consultation, Beth states, "I just don't get Molly! Growing up in my family, we didn't feel the need to share everything that Molly is constantly sulking about, and if we needed to communicate something, we just said it! I can never tell what Molly is trying to get at . . . and it annoys me how emotional she is!" During another phone consultation, Molly's RA hypothesizes that, "Molly has real problems standing up for herself, which appears related to how overprotective her parents have been. And Beth, she errs on the side of being pushy, and can come across as pretty cold. I wish I knew how to help them!"

The proposed systemic conceptualization of college roommate relationships could help Molly's counselor explain Molly's symptoms, which could in turn inform treatment plans. Rather than assuming Molly's depressive symptoms and difficulties adjusting to college are the result of homesickness alone, it may help to focus on how dysfunction within the roommate relationship may exacerbate her symptoms. In other words, *both* Molly and Beth's dysfunctional behaviors with respect to the roommate relationship (i.e., actor and partner effects) may impact Molly's symptoms. One could view conflict within the roommate relationship as a product of Molly's and Beth's dysfunctional family of origin environments. In other words, *both* Molly's dysfunctional family background (i.e., actor effect) and her roommate Beth's dysfunctional family background (i.e., partner effect) influence Molly's experience of dysfunction within the roommate relationship.

Based on this conceptualization, Molly's treatment plan could include working to improve the roommate relationship. This aspect of the treatment plan might involve helping Molly and Beth understand how each of their family of origin environments influences their interpersonal expectations of others, especially in the context of their relationship with one another. A more empathetic stance toward one another and a willingness to act differently in the roommate relationship than they had in their families of origin may follow.

If Molly's counselor were to work with both Molly and Beth together, the counselor could use techniques from family systems therapies. During an initial appointment with both Molly and Beth together, the systemic technique of interventive interviewing could facilitate perspective taking and shift patterns within the relationship (Tomm, 1987a). The counselor could help Molly and Beth understand the cyclical nature of their interactions rather than focusing solely on their own linear actions and reactions (Tomm, 1987b). For instance, "Beth, what do you do when Molly is feeling down? When you get annoyed/frustrated, what does Molly do? Molly, what do you do when Beth gets annoyed/frustrated with you? When you feel down, what does Beth do?"

The counselor could also use reflexive questions to redefine each roommate's actions (i.e., change how they interpret each other's behaviors) and explore new hypothetical patterns of interactions (Tomm, 1988). For example, "Molly, if you were to think of Beth's family as having a different way of dealing with emotions than your family, would it be easier or harder to not take her frustration with you personally?" "Beth, if you were to support Molly while she's feeling down, do you think it would take Molly longer to adjust to college or do you think her homesickness would go away quicker?" "Molly, if Beth viewed your homesickness as a temporary side effect of adjusting to being far away from parents that you are close to, would it be easier or more difficult for her to tolerate you feeling down?"

Techniques from integrative behavioral couple therapy (IBCT) could serve a similar purpose, as these techniques acknowledge interdependence within interpersonal systems. The counselor could use IBCT to promote Molly and Beth's acceptance of one another through the technique of empathetic joining: having each person express their emotions without accusations (Dimidjian, Martell, & Christenson, 2002). The counselor could provide neutral interpretations of each person's perspective (e.g., having different emotional expression "styles"), and encourage "soft" disclosures rather than "hard" disclosures (e.g., Molly discussing feeling hurt at overhearing Beth complaining about her to their hall mates, and Beth discussing feeling vulnerable when Molly shows sadness because she does not feel comfortable expressing that emotion herself). The counselor could also use tolerance interventions to help Molly and Beth let go of their desire for each other to be different or change. One could achieve this by illuminating positive aspects of negative behaviors and becoming desensitized to the negative behavior by repeating an amplified version of it in-session and faking the negative behaviors during times when they do not feel naturally compelled to do so while at home (Dimidjian, Martell, & Christenson, 2002). These acceptance and tolerance strategies could shift the roommate system, such that the cycle of negative interactions becomes less pronounced, or even dissipates altogether.

If Molly's counselor worked with Molly alone, rather than Molly and Beth together, she could use similar approaches. The counselor could help Molly increase her awareness of how interpersonal patterns within her family of origin affect her expectations of others and behaviors toward others. Through perspective-taking skills, Molly could understand and depersonalize Beth's actions. Assertiveness skills could help Molly interact differently with Beth than she acts within her family of origin. These techniques are compatible with family systems therapy, which assumes that changes in one family member have a snowball effect, resulting in shifts throughout the system. The techniques are also similar to IBCT's focus as much or more on the recipient of the behavior as on the agent of the behavior. In other words, altering the way that the recipient perceives the behavior (i.e., Molly interpreting Beth's discomfort with her emotional expression as a "different emotional style" rather than an attempt to hurt her emotionally) can have as much of a psychological impact as changing the agent's frequency or intensity of the behavior (Dimidjian, Martell, & Christenson, 2002).

Practice Applications for Residence Life Professionals

Residence life professionals versed in roommate relationship dynamics could use scenarios like the one with Molly and Beth to practice roommate conflict interventions. We envision training programs pairing counseling center and residence life professionals to create and practice interventions that incorporate the techniques described in the case study. Residence life professionals could use the systemic conceptualization of roommate relationships in the following ways. First, the conceptualization could guide screening or matching students for housing assignments by the interpersonal styles that are similar to their family of origin. Then professionals could design college orientation workshops that prepare first-year students with realistic expectations for roommate relationships and equip them with skills for successful cohabitation. Later, they could monitor students' roommate relationships for stressors that make them psychologically vulnerable, and conduct conflict resolution that emphasize the interdependence of college roommates and an awareness of their history of interpersonal system functioning. If roommates granted permission, a dialogue among residents, their staff, and counseling staff could further enhance the interventions. Lastly, professionals could enhance roommate relationships through workshops, group activities, and retreats that emphasize the same themes.

We believe that through these interventions, professionals could establish a language of interpersonal supportive inquiry within residence hall environments and systems that aids in communication and understanding. Many empirical questions about roommate relationships remain, and they need to inform implementation of these systemic interventions. Next, we address the gaps in research on roommate relationships and describe how research could aid student affairs professionals.

Recommendations for Future Research

Although sparse, research on college roommate relationships indicates that they affect students' functioning and mental health. There are notable limitations among the small number of studies on roommates. Many of the studies collected data from only one roommate, examined only one predictor or outcome, used cross-sectional data and methodologically-weak analyses, and lacked reliable and valid assessment of what causes roommate relationship difficulties. The following recommendations for future research can advance our knowledge in this area.

Dyadic Data Collection and Analyses

A systemic understanding of roommates would add to the literature by accounting for the interdependence within roommate dyads. We recommend collecting data from two or more roommates and using data analysis techniques that account for interdependence (such as APIM). Using APIM in family systems research has helped clarify the interdependence of family members' responses and shown that an individual's thoughts, behaviors, and feelings are significantly influenced by the thoughts, behaviors, and feelings of others within their system. (e.g., Friedlander, Kivlighan, & Shaffer, 2012; Kenny & Ledermann, 2010). Collecting data from more than one roommate within the interpersonal system of roommates and utilizing APIM would allow researchers to examine how students' perceptions of dysfunction within their roommate relationship affect both their own mental health and college adjustment (actor effects), as well as that of their roommates (partner effects). We also need to understand how relationship dynamics vary by the number of roommates they have.

Multiple Outcomes and Predictors

Research on roommate relationships should assess multiple outcomes and predictors in their research designs. Evaluating the effect of roommate dysfunction on outcomes such as psychological functioning, interpersonal domains, adjustment to college, academic performance, and retention would provide a more thorough understanding of the role that roommate relationships play in college student life. We need more study of how environmental characteristics such as living on or off campus, size and diversity of the student body, the design of living spaces, and distance from home relate to the functioning of roommate relationships.

Match/Mismatch Patterns in Individual Differences Between Roommates

Examining individual differences such as race and sexual orientation among roommates could provide a greater understanding of match/mismatch patterns that influence the functioning of roommate relationships. The compatibility of roommates' personality traits, behavior patterns (e.g., drinking, sleep vs. waking hours), and communication styles may be associated with optimal or detrimental outcomes. Some research has examined this topic. In a study of 84 female roommate pairs, many differences among personality traits were unassociated with levels of conflict, although the more dissimilar the roommate pairs were in conscientiousness and need for autonomy, the less they liked each other (Heckert et al., 1999). A study of 180 pairs of roommates in a large Midwestern university indicated that roommates who were similar in communication patterns (i.e., both roommates were high in willingness to communicate and communication competence, and low in verbal aggressiveness) reported the highest roommate satisfaction and liking (Martin & Anderson, 1995). In a study of 150 roommate pairs at a predominantly White Southeastern university, the roommates who both identified as White had higher relationship satisfaction than African American-White dyads (Phelps et al., 1998). Besides continued research on American roommate differences in ethnicity, we could better understand cultural effects by studying roommate relationships that include international students. Studies should also compare matching with random assignment of roommates.

Future research should explore how differences between roommates' families of origin affect their relationship. It would be informative to see whether matches/mismatches between certain styles within families are more predictive of roommate relationship dysfunction. In terms of the case example presented earlier, if Molly had been paired with a roommate whose family was similarly over-involved emotionally, and Beth had been matched with a roommate whose family was similarly distant emotionally, their roommate relationship might have been much more positive, despite the fact that both family descriptions represent theoretically dysfunctional family of origin environments. Results of research examining these nuances in family of origin environments could be used to optimally match roommates together.

Longitudinal Data Collections

The research literature on roommate relationships would be significantly enhanced with longitudinal data collection. Ideally, one would assess college students before, during, and after living together and follow them across multiple roommate arrangements as long as they are students. An examination of baseline functioning and later outcomes would aid in understanding the trajectory of change within roommate relationships, as well as associated changes in outcomes of interest. Results would allow residence life staff and student affairs to identify normal developmental stages of roommate relationships (e.g., a "honeymoon" period at the beginning of the semester, followed by increases in conflict), and detrimental factors at various time points that could signal a need for intervention. This research design would provide evidence of the directionality among variables related to roommate relationship functioning.

We have critically examined the research findings on roommate relationships and proposed that family systems theory could help to better understand roommate relationships and lead to the development of more methodologically rigorous research that includes systems concepts. Our hope is that increases in our knowledge of good functioning roommate relationships will guide student affairs professionals in designing interventions that lead to greater student mental health and adjustment to college.

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