# Resident-to-Resident Aggression in Nursing Homes: Results from a Qualitative Event Reconstruction Study

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**Purpose:** Despite its prevalence and negative consequences, research on elder abuse has rarely considered resident-to-resident aggression (RRA) in nursing homes. This study employed a qualitative event reconstruction methodology to identify the major forms of RRA that occur in nursing homes. Design and methods: Events of RRA were identified within a 2-week period in all units (n = 53) in nursing homes located in New York City. Narrative reconstructions were created for each event based on information from residents and staff who were involved as well as other sources. The event reconstructions were analyzed using qualitative methods to identify common features of RRA events. **Results:** Analysis of the 122 event reconstructions identified 13 major forms of RRA, grouped under five themes. The resulting framework demonstrated the heterogeneity of types of RRA, the importance of considering personal, environmental, and triggering factors, and the potential emotional and physical harm to residents. Implications: These results suggest the need for person-centered and environmental interventions to reduce RRA, as well as for further research on the topic.

Key Words: Abuse/neglect, Behavior, Long-term care, Aggression

The past two decades have seen increasing research interest in the topic of interpersonal aggression experienced by older persons. The literature on elder mistreatment in the community has grown steadily (Aciemo et al., 2010; Biggs, Manthorpe, Tinker, Doyle, & Erens, 2009; Laumann, Leitsch, & Waite, 2008). A smaller, discrete literature on elder mistreatment inflicted upon older people by staff in institutional settings has also emerged (Payne & Cikovic, 1995; Phillips & Guo, 2011; Pillemer & Moore, 1989; Shinan-Altman & Cohen, 2009). Other research has addressed the reverse pattern: aggression initiated by older people themselves, often directed toward individuals caring for them both at home and in institutions (Enmarker, Olsen, & Hellzen, 2011; Finkel, Costa de Silva, Cohen, Miller, & Sartorius, 1997; Hall, Hall, & Chapman, 2009). In the nursing home, research shows that physical or verbal aggression from residents toward staff is common (Gates, Fitzwater, & Meyer, 1999; Gates, Fitzwater, Telintelo, Succop, & Sommers, 2004) and comprises a significant source of stress for caregiving personnel (Everitt, Fields, Soumerai, & Avorn, 1991; Goodride, Johnston, & Thomson, 1996).

Despite this growing interest, little scientific attention has been paid thus far to a potentially

prevalent and injurious behavior in nursing homes: mistreatment that residents receive from other residents, referred to in this article as resident-toresident aggression (RRA). For this study, RRA was defined as negative and aggressive physical, sexual, or verbal interactions between long-term care residents that in a community setting would likely be construed as unwelcome and have high potential to cause physical or psychological distress in the recipient. To date there have been three published empirical articles specifically on RRA, which drew on police contact or incident reports filed by nursing homes (Lachs, Bachman, Williams, & O'Leary, 2007; Shinoda-Tagawa et al., 2004) and focus groups with nursing home staff and residents (Rosen et al., 2008). Despite methodological limitations, these studies have demonstrated that RRA is sufficiently common in nursing homes to be a cause for concern.

There is also preliminary evidence that the consequences of RRA on victims must be taken seriously. In the only study to directly address outcomes of RRA, Shinoda-Tagawa and colleagues (2004) analyzed injuries sustained from another nursing home resident that were reported to a state-run incident reporting system during one calendar year. Their study restricted the cases under study to only those physical assaults that left lasting and visible damage, such as fractures, lacerations, dislocations, and bruises. Of the 294 incidents reported, the most frequent types of injuries were lacerations (39%), bruises (36%), and fractures (13%), with the majority of residents (56%)being hurt in the face or head. Emotional or psychological consequences of RRA on residents were not addressed.

Given the lack of research knowledge about the problem, its probable prevalence, and the negative outcomes for victims, research on this topic is greatly needed. A pressing priority is to gain a better understanding of the major types of RRA that are likely to be found in nursing homes. Although it is typical to describe the problem globally as "resident aggression" or "resident-to-resident elder mistreatment," it is likely that a wide range of specific events are involved in RRA, the span of which is currently unknown. In this article, we report on findings from a qualitative, exploratory study in which RRA events were identified in three nursing homes in New York City over a 2-week period. A broad range of RRA events was assembled and categorized into major themes, providing a detailed portrait of the phenomenon.

#### Conceptual Framework for the Study

The conceptual framework on which this study is based is the social-ecological model, which has become increasingly prominent in social science and public health research (Lucie, Gauvin, & Raine, 2011). The hallmark of the social-ecological approach is an emphasis on the interconnection of human interactions with physical and sociocultural surroundings. That is, rather than attributing behavior to a narrow range of psychological or biophysical variables at the individual level, it includes varied influences at multiple levels (Sallis et al., 2006). Specific behaviors are thus treated as interactions between individuals and the physical and social environment rather than taking a linear, sequential view of causality and focusing solely on individual-level behaviors and risk factors (Lucie et al., 2011).

The social-ecological framework is particularly applicable to the study of RRA because it conceptualizes nursing homes as highly contingent environments, in which the behavior of an individual resident is difficult to separate from the social partners with whom he or she interacts (Baltes, 1988; Rose & Pruchno, 1999). Further, individual resident behaviors and that of dyads are contingent on the nursing home environment. The socialecological model posits that even if a resident's behavior appears to be the source of a problem, such behavior does not take place in a vacuum but instead is shaped by the physical and social environment (Grzywacz & Fuqua, 2000). That is, rather than relating behavior exclusively to a single personal, behavioral, or environmental factor, this framework includes varied influences at multiple levels (Sallis et al., 2006; Stokols, 1992).

Ecological models have been applied to nursing home settings, exemplified by the classic work of Lawton (Lawton, 1974, 1989). Based on this approach, we propose that RRA is one potential outcome of poor fit between the abilities of the person and the physical and social environment (Smith, Hall, Gerdner, & Buckwalter, 2006; Nahemow & Lawton, 1973). Further, the interactional nature of RRA adds to the complexity of the phenomenon. The needs, person–environment fit, and antecedents or consequences for both members of the RRA dyad must all be considered in order to better understand the influences that contribute to aggressive behavior.

The perspective just described forms the conceptual underpinning to our approach for deriving

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a descriptive framework of RRA types. This approach contrasts with some models used in the study of aggression in nursing homes and in other settings. In the domestic violence literature, extensive effort has been placed on developing inventories or scales of aggressive acts; indeed, the majority of studies have taken this approach (Foshee et al., 2007). Specifically in the field of elder abuse, researchers have devoted considerable effort to identifying the range of behaviors that should be included in definitions of elder mistreatment (cf. Ramsey-Klawsnik, 2000). In the study of RRA, this approach was taken by Rosen and colleagues (2008) who developed 35 different categories of physical, verbal, and sexual RRA, based on a focus group study. Alternatively, categories have been created based on the characteristics or motivations of abusive individuals (Johnson & Ferraro, 2000), an approach to RRA taken by Lachs and colleagues (2007).

The social-ecological model suggests that such formulations may not correspond adequately to the complexity of aggressive acts between residents in the nursing home setting. We propose that an inventory of forms of RRA should take a more holistic approach, given the interactional and contextual nature of the nursing home setting. It is likely that phenomena such as RRA are actually chains of events, in which it often difficult to identify the source and consequences of each individual action, similar to other resident behaviors in the nursing home (cf., Baltes, Honn, Barton, Orzech, & Lago, 1983). Therefore, distinguishing victim and perpetrator can be difficult (Lachs et al., 2007). In addition, studies of domestic violence frequently incorporate the intent of the abuser, which is often uncertain in nursing homes due to the high prevalence of brain disease (Köhler, Weyerer, & Schäufele, 2007; Matthews & Dening, 2002). The scope and nature of RRA suggests that multiple, interacting factors should be considered.

#### Methods

#### Selection of Facilities

Five nursing homes were randomly selected using a simple random sampling procedure with replacement from the population of 21 skilled nursing facilities with 250 or more beds in two New York City boroughs: Manhattan and the Bronx. All facilities were large, urban nursing homes delivering skilled and rehabilitation care. State and national data for quality measures, inspection reports, and staffing for the sample facilities were compared with New York State at large and national data. Average scores on these measures were comparable to nursing homes of similar size at both the state and national levels. Data for the analyses in this article are from three of the five facilities selected; saturation was achieved after data collection in three facilities with no substantively new events emerging. Data collection was conducted in all units in the three facilities, for a total of 53 units. Of the 53 units, 7 were short-stay units and 7 were dementia care units.

Extensive procedures were employed to ensure the protection of human subjects, and the protocol was approved by the IRBs of three different institutions. All research staff completed human subjects research training prior to interaction with participants. If any nursing home participant showed signs of fatigue, physical discomfort, or psychological distress, research staff discontinued the interview. Careful hiring of interviewers ensured both professional competence and responsibility. Guidelines of the Health Insurance Portability and Accountability Act were carefully followed throughout the study.

#### Identification of RRA Events

The goal of this study was to gain in-depth knowledge of RRA events using a qualitative approach. To identify events, we used the following sources: (a) resident interview, (b) certified nursing assistant interview, and (c) interviewer observation. An Event Log worksheet was completed based on this information (see Supplementary Material). This form contained descriptive information about the time, place and duration of the event, the reporting source, the participants and witnesses, and a brief description of the event and environmental factors (lighting, noise and crowding) at the time of the event. Additionally, information about the circumstances of the event was coded.

Residents who were capable of being interviewed were administered a questionnaire created for this study. Residents were asked about their own experiences of RRA over the prior 2-week period using a structured interview. All certified nursing assistants (CNAs) on the study units were also interviewed and were asked to report about all residents whom they cared for in the past 2 weeks, allowing data to be collected on almost all residents in the unit. To augment the reports of residents and staff about RRA events, research assistants who collected these data were present in the unit for much of the day and evening shifts during the 2-week interview and observation period. They occasionally observed RRA events and noted and reported each of these observations to the research team. The goal was to use all three of these methods to enumerate as many RRA events as possible during a 2-week period.

When RRA was identified, an Event Reconstruction Interview and Chart Review (Supplementary Material) took place. This activity involved a detailed interview with staff members who were reported as witnessing the events, as well as the nurse in charge, using a semi-structured format. The following areas were probed in the CNA interview. Awareness of the event was confirmed, followed by (a) details related to provocation and conclusion of the event, (b) details prior to the event, (c) familiarity (whether or not this was a regular occurrence), (d) social changes (events such as recent death of friends, changes in visitors), (e) result of events (was it reported, were there injuries, medical intervention, care planning), (f) other witnesses, and (g) opinions about prevention and actions to take. The interview with the nurse on duty was similar except information about the individual's history and medications were also elicited. Interviews with social workers were also conducted for some of the residents for background information. A chart review to obtain resident background data was also conducted by the research assistants.

Finally, an Event Narrative Summary (Supplementary Material) was completed. This summary was a detailed qualitative write-up of the event incorporating information from all the available aforementioned sources. The narrative followed a structured format and included the following sections: (a) site, (b) reporting source, (c) setting and environment, (d) details of event, (e) intervention used and aftermath (f) dyad history, (g) resident background, (h) interpretation of the event, and (i) type of staff member interviewed. The final Event Narrative Summaries were used in creating the categories of RRA.

# Analysis and Categorization of Events

A total of 139 events that were identified and reconstructed were initially included for analysis. Four of the investigators (K.P., K.V., E.C., M.L.) considered all events and decided by consensus to eliminate 17 cases based on clear violations of the working definition of RRA. Events were eliminated if (a) they failed to describe a defined event or to specify a victim (e.g., they characterized a resident's actions as general, as in "yells and curses at everyone" or "always shouts at others"), (b) a staff person rather than a resident was the victim, and (c) if two reports described the same RRA event (e.g., a resident reported an event of being screamed at by his roommate and a staff member also reported the same case of a verbal altercation).

The remaining 122 cases were sorted into categories by the same co-authors. Our goal in analyzing the event reconstructions was to develop as exhaustive an inventory as possible of forms of RRA. The investigators, representing the fields of geriatric medicine, geriatric clinical psychology, and social gerontology, read and re-read the event reconstructions, seeking patterns in the social dynamics and context of events that would allow them to be placed in categories. Codes were developed for the events during this intensive review of the available information. In contrast to having coders working independently and calculating kappas based on coders' consistency, we used a consensus approach based upon the group interactive analysis component of Borkan's "immersion/crystallization" method for analyzing qualitative data (Bertram, Kurland, Lydick, Locke, & Yawn, 2001; Borkan, 1999). In this process, each rater made determinations of categories for the events by organizing the events and corroborating them with the rest of the team. Consensus was achieved on the final set of categories of RRA using this process.

Several aspects of the study help to ensure trustworthiness of the findings. In terms of credibility, we selected as many participants as possible from the main actors in the setting (staff and residents), so sample bias was minimized and multiple perspectives were included. The inclusion of observations by trained research assistants adds to credibility. Our use of multiple raters of events helped to reduce the impact of subjective interpretations, as did the consensus process for categorizing events. Dependability was addressed through collecting events in a 2-week time frame and recording data systematically for all participants. Transferability of findings to other settings appears to us to be high, given that nursing home environments are relatively standardized.

As an additional method of ensuring the trustworthiness of the event categorization, we employed a "member check," a widely used qualitative

Category 1: invasion of privacy or person	al integrity
Incursion on personal space (7)	A resident reacts verbally or physically because of perceived physical threat, either real or exaggerated, from another resident, usually the invasion of personal space.
Invasion of room privacy (16)	A resident enters another's room without invitation, sometimes touching his or her belongings and making him or her feel threatened or uncomfortable.
Clearing a way through congestion (8)	Verbal or physical aggression prompted by the aggressor's desire or attempt to move through a space; collisions or scuffling that occurs between proximate residents trying to move about.
Inappropriate caregiving (2)	Suggestions or instructions from one resident to another in an attempt to take on the role of a caregiver.
Category 2: roommate problems	
Roommate disagreements (12)	Annoying or disruptive behavior of a roommate, sometimes leading to arguments about behavior in the room, such as, music being played too loudly or temperature.
Belligerent roommate (11)	Repetitious aggressive or antagonistic behavior from one roommate to another, seemingly without cause.
Category 3: hostile interpersonal interacti	ons
Angry attempts at social control (13)	Imperative statements made with the intent of changing another resident's behavior, most often to prevent another resident from being disruptive or to conform to a normative standard for the setting.
Arguments (7)	Aggressive verbal exchanges in which two residents engage in an angry dispute about a topic.
Disproportionate response to normal interaction (7)	Insults or mean-spirited responses or statements made during a typical interaction with another resident; often the result of a disproportionate anger response.
Teasing or joking (6)	Sarcasm, jeering, or making fun of a resident that was perceived as hurtful.
Accusations (5)	In a threatening manner, a resident (inaccurately) accuses another resident of having stolen something or invaded his or her privacy.
Category 4: unprovoked actions	
Unprovoked actions (21)	Unprovoked and unanticipated aggression.
Category 5: inappropriate sexual behavio	
Inappropriate sexual behavior (7)	Unwanted sexual advances and intentional nudity or exposure in the presence of other residents.

technique (Lincoln and Guba, 1985). The categories were provided to the eight research assistants who had conducted data collection with staff and residents as well as observations on the units. These individuals were presented with the original set of RRA categories and were asked to evaluate them in terms of their immersion on the units under study. Their suggestions were evaluated by the coinvestigators and used in the final determination of categories.

#### Results

Five broad themes emerged from the qualitative analysis of the event reconstructions. These overarching themes are as follows: invasion of privacy or personal integrity, roommate issues, intentional verbal aggression, unprovoked actions, and inappropriate sexual behavior. Within three of these five themes, we identified several forms of RRA events, resulting in 13 particular forms of RRA (Table 1). The descriptions of each of these forms include a representative RRA event for the category. An attempt was made to identify events that most closely represented the category in question and exemplified the interaction between various components of the situation.

# Invasion of Privacy or Personal Integrity

In a relatively closed environment such as a nursing home unit, some degree of routine aggravation can be expected as residents struggle to retain the integrity of their personal space, rooms, or freedom of movement. Three forms of RRA events resulted from such incursions in those areas and efforts to protect person or property.

Incursion on Personal Space.—A number of events of RRA were the result of disproportionate or extreme self-defensive behavior by residents who felt threatened by another resident. In one event of RRA in the TV room, a resident in a wheelchair approached another resident who was sitting in a chair. The approaching resident wheeled close to the seated woman and placed a hand on the arm of the chair. This prompted the seated woman to begin to yell "Stop it! Stop it!" and hit the hand of the resident in the wheelchair. Presumably, she was uncomfortable by the proximity and became aggressive.

Another event involved a resident in a wheelchair who screamed at and threatened a resident who attempted to wheel past her in the activity room because she was afraid that the passerby's wheelchair would run into her feet. The fear was legitimate, as a collision would be quite painful, but the reaction was disproportionate. In another event of this type, as a resident in the activity room turned to throw something away, she inadvertently jostled the women sitting next to her who made an audible complaint. The latter resident was told to "shut up" by the first resident, who then began to bump her with her wheelchair.

Invasion of Room Privacy.—In these events, a resident (who is not a roommate) enters another resident's room without invitation, sometimes touching personal belongings and making the room's resident feel threatened or uncomfortable. One man woke in the night to find another resident going through his sock drawer. On being confronted, the wanderer took the man's socks and ran out of the room. In some reports, the perpetrator was acknowledged to be a wanderer. One victim described the perpetrator as a "confused lady" who would wander into his room and need to be told to leave. In other accounts, residents reported feeling threatened or harassed by the wanderer.

*Clearing a Way Through Congestion.*—Verbal and physical aggression stemmed from crowded situations in the unit, when residents' movements were impeded by other residents. When a path was obstructed by other residents or an area was too crowded to move through freely, collisions or scuffling between nearby residents would occur. A man in a wheelchair whose path through the hallway was blocked by another resident in a wheelchair called her an "SOB," insulted her mother, and made a threatening gesture with his fist. The woman then reached out and punched the man in the arm.

Inappropriate Caregiving.-Residents sometimes attempted to act as caregivers to other residents,

perhaps out of habit or in a genuine effort to be helpful. For example, while a staff member was trying to convince a reluctant resident to have blood drawn, a nearby resident interjected "Don't be so stubborn. It's for your own good!" The resident having blood drawn perceived this as invasive, became upset, and shouted at the other resident.

# **Roommate Problems**

Two forms of RRA emerged that were related to the actions of or conflicts with roommates.

Roommate Arguments.-Residents described conflicts or arguments with their roommates about the "rules" for using their shared room. These types of events included one roommate having the volume of a radio too loud, opening a window to make the room cooler, and turning the lights and the television on in the middle of the night. That person's roommate then responds with an angry or indignant request for his or her roommate to cease the behavior. Although these events were characterized as interpersonal aggression according to the residents who reported them, the types of disagreements and the tone of the conflict appear similar to what might happen between any two roommates who are negotiating issues of living together.

Belligerent Roommate. - In contrast to roommate disagreements that seem to some extent routine, other accounts of roommate behavior were one sided, more clearly aggressive, often repetitious, and more disturbing. Some of these cases seem to originate in the memory issues or dementia of a roommate, such as a case where a resident screamed at her roommate to leave the room, thinking she was an intruder. After the roommate asserted that she was not going to leave, that she had paid for the room and that it was her room, too, the instigator seemed to recognize her mistake and apologized. Another man reported that his roommate constantly told him to shut up, and this repetitive and unprovoked behavior was observed by researchers during data collection. For a resident with general agitation or hostility, a roommate can become a convenient target of aggression.

# Hostile Interpersonal Interactions

The nursing home is an interactional setting, in which active residents engage in conversation with

other residents throughout the course of the day. This study uncovered several forms of RRA that involved primarily verbal aggression and individuals' aggressive reactions to such negative verbal interactions.

Angry Attempts at Social Control. – A number of RRA events included a resident who was attempting to exert social control over other residents through the use of imperative statements or commands. This "bossing" of other residents appeared in the form of refereeing a conflict between two other individuals, an attempt to prevent another resident from being disruptive, or encouragement to conform to a normative standard for the setting. A resident who was continuously vocalizing while other residents were watching television was told to quiet down. In another case, a resident who was causing a commotion in the activity room, trying to adjust the shades and bumping into people, was shouted at to "Sit your ass down!" by another resident.

Arguments. —Reports of two residents mutually engaged in verbal conflict or aggression were categorized as arguments. Arguments were characterized by an aggressive back-and-forth between residents. In one argument, a resident attempted to speak with another resident who was reading a book. The resident who was reading found this irritating and told the approaching resident to shut up, sparking a continued argument between the two residents.

Disproportionate Response to Normal Interaction. - In the course of typical interactions, insults, mean-spirited responses, disproportionate anger response, or unkind honesty were reported as RRA. For example, when a resident asked her roommate to keep the air conditioner on, the roommate responded that she only needed it because she was "a fat pig." The hallmark of this type of RRA is that the situation had the capacity to continue in a normal, nonaggressive fashion until a participant chose to be rude or insulting. On different occasions, residents who were talking over a television or music became aggressive and "exploded" when asked politely to be quiet.

*Teasing or Joking.*—In the course of conversation between residents, sarcasm, jeering, or making fun of a participant was reported as a form of aggression.

The resident who was teased was often hurt by the comment, joke, or gesture. From an outside perspective, the victims may appear to be overly sensitive or have "thin skins," but they often reported lasting emotional distress from this type of event. Two friends, one of whom is a native Spanish speaker, were reported to have a good rapport and frequently spend time together. One had the habit of mocking her friend's language when she got bored or annoved, saving "Blah, blah, blah." He reported this as being hurtful. In another event, a joke about a resident's tropical print shirt—"With my long hair and your tropical shirt, we make the perfect hippie!"-was taken up by a bystander who commented that a resident with apparently thinning hair would "do better with some of that hair!" This offended and hurt the target resident, who complained that the perpetrator often made mean comments about her thinning hair.

Accusation. - In this type of RRA, the act of aggression was a disturbing accusation by another resident. The accusations were mostly related to theft of personal belonging or invasion of privacy (i.e., going through one's drawers). Accusations were often made in a way that threatened retaliation. For example, a resident became convinced that something she had dropped on the floor, a gift from a daughter who recently visited, was stolen by another resident. She addressed several residents gathered at the nurses' station, pointing at them and saying threateningly, "You're all going to pay!" Several events were between roommates, where one roommate accused the other of stealing or implied that they were being vigilant against anticipated theft by the roommate.

# **Unprovoked** Actions

A number of events were identified as "unprovoked" or "random" aggression. In these cases (even ones that were directly observed by research staff), a resident appeared to verbally or physically assault another resident without cause. In reports where any explanation of the event was given, the individual was reported as having limited or no control over his or her behavior, simply lashing out at other residents without warning. Despite thorough data collection on resident and situational factors, motivation for aggression is not always observable or knowable.

A number of events were characterized by aggressive words directed at an individual that

were not part of an ongoing conversation or interaction. These events may take the form of a demand, but the demands were not normative for the setting. For example, during dinner, one resident turned to another at her table and told her to stop talking, although the perpetrator was not involved in the conversation and the conversation was appropriate to the setting. Spontaneous insults were also included in this category. For example, in the activity room, a resident began to speak to another seated resident in Spanish, as if she wanted to sit down next to her. The seated resident responded, "Shut up, bitch," and the other resident walked away.

Unprovoked and unanticipated physical aggression was also observed in several cases. A resident reported being struck from behind while walking down a hallway. A CNA reported a resident and his visiting wife who were struck by another resident seated in a wheelchair in the lounge area. The wife, unaware of the combative resident, sat with her husband beside this man, who then lashed out.

# Inappropriate Sexual Behavior

Unwanted sexual advances from other residents and intentional nudity or exposure were reported as RRA. One resident approached the victim in the hallway, putting a hand on his stomach, and then moving the hand down, at which point the victim told him to stop and go away. Another resident reported finding a man lying in her bed who needed to be removed by a CNA. The presence of the man in her bed was perceived as a sexual threat.

# **Conclusions and Future Directions**

This study used a social–ecological approach to identifying main forms of RRA events in the nursing home. In contrast to previous studies of RRA, events were systematically identified from several sources, including resident interviews, staff interviews, and direct observation, leading to a more comprehensive inventory of RRA types. The use of trained interviewers to reconstruct events allowed for more detailed qualitative analysis than has been possible in previous studies. The main themes that emerged from the event reconstructions demonstrate that RRA is perceived by staff and residents as extensive and often is a cause of significant concern.

Although an exploratory study such as this one cannot be definitive, the diversity of RRA events

uncovered in the points to implications for practice. The findings of this study are consistent with calls for "person-centered" care in nursing homes (Flesner, 2009; Koren, 2010). Specifically, the analysis confirms the appropriateness of the socialecological model, highlighting the need to understand RRA as interactional events that are determined jointly by the individual characteristics of residents and the environmental context in which they occur. It is clear that "one-size-fits-all" interventions for aggression by residents toward one another are unlikely to work, given the diversity of event types. For example, some events of verbal aggression resemble bullying, in which programs that reduce conflict and encourage civility may be useful. Other verbal aggression occurs toward residents with behavioral symptoms; in such cases, staff attention to unmet needs (such as poorly managed pain) is likely necessary. Chronic verbal altercations among roommates require solutions specific to that situation. Thus, interventions must take individual resident needs and abilities into account, developing personalized solutions to RRA.

In many ways, our growing understanding of community elder abuse over the last three decades provides a helpful clinical exemplar for the relatively new field of resident-to-resident aggression in the nursing home. When viewed as a single problem from the vantage of clinician, much richness of the data is lost and treatment strategies tend to be oversimplified. For example, we have come to understand that different typologies of community elder abuse require different interventions. The stressed caregiver who strikes a demented loved one in frustration will require an entirely different series of interventions than the schizophrenic adult child who is nonadherent with medications and strikes a parent, yet we call all these situations "elder abuse." Similarly, standardized reactions to RRA in the nursing home (such as routinely separating those who engage in RRA without an understanding of context) could conceivably have deleterious effects, such as potentially limiting the social network of residents who both guarrel and provide a social network for one another in an environment where social interaction is crucial.

Our results also suggest several directions for future research. First, the central finding of the study is that RRA encompasses a wide range of behaviors, rather than constituting a single discrete phenomenon. The diversity of RRA events in this study mirrors what is known about the complexity of aggressive behaviors among nursing home residents. A review by Hall and O'Connor (2004) found that aggressive behavior in general relates to level of cognitive impairment, comprehension deficits, brain pathology, pain, and depression, as well as environmental factors. Another review points to the relationship between pre-morbid personality and aggression (Osbourne, Simpson, & Stokes, 2010). The research implication of this heterogeneity is that categorizing all cases of RRA as a single clinical entity is unlikely to lead to successful studies of etiology, natural history, or intervention studies. Future research should employ a more nuanced and differentiated view of RRA, taking into consideration the possibility that the causes and consequences of various types may differ significantly.

Second, environmental characteristics of a nursing home are likely to contribute to RRA. A number of the event types we have detailed in this article seem amenable to environmental modifications, including a reduction in crowding, attention to congestion of wheelchairs, and nonrestraining barriers to unwanted entry of rooms. Research is needed that examines the environmental correlates of RRA and the degree to which environmental modifications may mitigate it. Several models of care based in social-ecological approaches could be useful in conceptualizing the potential causes of RRA. These include the Progressively Lowered Stress Threshold Model (Smith et al., 2006), the Need-Driven Dementia Compromised Behavior Model (Whall & Kolanowski, 2004), and the Competence Press Model (Nahemow & Lawton, 1973). All these frameworks for intervention could respond to the interactional nature of RRA as a complex interplay between the needs and competencies of both residents involved in the aggressive event on the one hand and aspects of the physical environment on the other.

Third, this article has focused on analyzing and categorizing events; as such, our aims were primarily descriptive. Building on this effort, an important task for researchers is to begin to identify specific risk factors for RRA. For example, do resident characteristics such as age, gender, or cognitive status affect the likelihood of victimization? Further, are there environmental risk factors, such as whether an individual has a private or shared room? Such knowledge is critical to the development and targeting of interventions. For example, identical interventions may not be appropriate for residents with and without cognitive impairment or even residents with different personality characteristics or backgrounds. Risk factor studies that examine individual and contextual factors are an important next step in understanding RRA.

The study has three limitations that point to needs for future research. First, the number of facilities was small. Second, the study was limited to the New York City region. There are no clear grounds for hypothesizing that the types of RRA encountered would differ among facilities (although the frequency of occurrence probably would vary) or by region. However, to ensure generalizability and transferability of findings, it would be ideal to include a larger number of facilities representing both metropolitan and nonmetropolitan areas in future studies. Finally, the methodology used does not permit resident-level inferences. For example, it is acknowledged that events identified and classified above as unprovoked may actually be caused by a number of latent factors, ranging from mental illness to dementia to pain, that should be identified in future research to inform effective prevention.

Despite these limitations, we believe that the conceptual framework and methods, as well as the data collection strategy, produced a comprehensive set of RRA types that can set the stage for future program development and research on this topic. Geriatricians, psychologists, nurses, and social workers excel at proffering patient- and familyspecific interventions in the community for a wide variety of geriatric syndromes; this should also be the case in meeting the challenge of RRA in longterm care. Further refinement of our proposed schema of RRA forms will help residents and staff struggling with this complex problem. Given the extent of RRA events and the distress caused for residents, such efforts should be a high priority for intervention research.

#### **Supplementary Material**

Supplementary material can be found at: http://gerontologist. oxfordjournals.org.

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