

Social Learning in Rockaway, New York after Hurricane Sandy

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Abstract:

After a disaster, communities find various ways to come together in order to respond and recover, including how to communicate a desire to return, to assess damage, and to overcome barriers to rebuilding through collective yet voluntary action. Such communities find ways to successfully recover by utilizing preexisting social capital and through a process of social learning by innovation and imitation. This paper explores how this process took place in Rockaway, New York after Hurricane Sandy, including how groups (a) adapted existing organization structures and (b) created new procedures and imitated the successful actions of others in order to spur recovery.

Keywords: disaster recovery; collective action; social capital; Hurricane Sandy; Rockaway, NY

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I. Introduction

Hurricane Sandy made landfall on the east coast of the United States on Monday, October 19th, 2012. The storm is the second-largest Atlantic storm on record, having affected numerous Caribbean islands and states all along the eastern seaboard. In the United States, over 70 lives were lost, \$50 billion in damages were incurred, and over 8.5 million customers lost power (Blake et al. 2013).

While the storm was downgraded from a hurricane to a post-tropical cyclone before hitting New Jersey and New York, the combination of 80 mph winds and a massive storm surge of up to 9 feet of water devastated coastal communities (Blake et al. 2013). Many residents evacuated, yet others stayed behind, citing their experiences of evacuating but incurring little damage from Hurricane Irene the previous year (Buckley 2012). In the Rockaway peninsula—a relatively isolated peninsula in Queens, New York also known as the Rockaways—there was five to six feet of flood water, wide-spread power outages, and fires resulting from the storm. Residents went weeks without power or help from federal authorities and had to figure out others ways to assess damage, obtain resources, and recover.

This paper explores how communities in the Rockaways responded to and recovered after Hurricane Sandy. Specifically, it examines how an Orthodox Jewish community in the Rockaways utilized its existing organizational structures and expertise to adapt to the conditions after the storm. Through the recovery process, community leaders learned how to overcome the uncertainty and burden of recovery, by altering existing organizations, creating innovative procedures, and sharing best practices with one another. Further, entrepreneurs

from outside the Orthodox Jewish community observed and imitated their actions in order to fulfill the needs of their neighborhoods.

The literature on social capital and networks examines the strength and robustness of relationships between members of groups, including the strong ties within homogenous groups and the weak ties within and among heterogeneous groups (Granovetter 1973; Bourdieu 1985; Woolcock 2001). Like entrepreneurs in the market who find and seek profit opportunities by finding ways to imitate and improve on existing goods and services (Kirzner 1973), social entrepreneurs can improve upon existing social networks by finding and exploiting informational opportunities within and across social networks, thus providing a way for social learning to take place and spread (Burt 2001).

By applying this literature to the post-disaster context, studies have found that both close-knit homogeneous communities and loosely-connected heterogeneous communities can utilize their social networks to navigate the post-disaster environment (Chamlee-Wright 2010; Chamlee-Wright and Storr 2009a, 2009b, 2010; Storr and Haeffele-Balch 2012; Grube and Storr 2014). Social learning in the post-disaster context occurs through the entrepreneurial actions of community leaders who find ways to navigate the uncertainty and complications of providing assistance, securing resources, and encouraging residents to return and rebuild. As Chamlee-Wright (2010, 15) remarks, "given the fact that it takes time for official forms of disaster assistance to arrive and the normal routines of market life to return, the resources embedded within social networks can prove vital to individual and community-wide recovery."

We aim to build off of and expand this literature by examining how communities utilized existing social capital to address needs and how social learning took place in

communities in the Rockaways after Hurricane Sandy. We posit that social learning took place in both the homogenous and close-knit Orthodox Jewish community as well as the heterogeneous and loosely-connected community in the more densely populated neighborhoods through a process of (a) adapting existing organization structures and (b) creating new procedures and imitating the successful actions of others.

This paper proceeds as follows. Section II further examines the literature on social capital and networks that will be utilized to analyze social learning in the Rockaways after Hurricane Sandy. Section III provides a brief explanation of the research methods. Section IV explores how the communities in the Rockaways were able to come together in order to respond and recover after Hurricane Sandy. Section V provides implications and concludes.

II. Literature on social capital and the process of social learning

Social capital, a term first thoroughly examined in the social sciences by Bourdieu (1985), has been utilized to examine groups of individuals and how individuals interact with one another within a group to pursue their goals (Coleman 1988; Foley and Edwards 1999; Portes 2000; Adler and Kwon 2002). Woolcock (2001) identified three categories of social capital: bonding, bridging, and linking. Bonding social capital exists between members of close-knit homogeneous groups, like the strong ties of the Orthodox Jewish community in Far Rockaway. Bridging social capital is the ties between members of heterogeneous groups, like the weak ties among members of a volunteer association. And, linking social capital connects members from different groups.

Correlations between social capital, comprised of both strong and weak ties, has been linked with education, financial success, and economic growth (Coleman 1988; Granovetter 1973, 1983; Knack and Keefer 1997; Woolcock 1998). Not only can groups improve the societal wellbeing of their members by cultivating social capital, but they can also utilize their existing networks to create new procedures and imitate useful characteristics from others in order to facilitate coordination. Social entrepreneurs can improve upon existing social networks by finding and exploiting informational opportunities within and across social networks (Burt 2001).

As Burt (2001) explains, in environments where transactions are complex and information is imperfect, individuals may decide to imitate others in their social network. They may imitate those who have a history of success (reputation) or those who have received positive feedback. Through these innovations and imitations, social learning can take place throughout the community, signaling which procedures and actions are successful and which are not.

In the post-disaster context, communities face limited access to resources and uncertainty over when needed services will be restored and formal disaster assistance will arrive. In this time of uncertainty, the connections and resources that already exist in the community can play a crucial part in recovery (Chamlee-Wright 2010). Research has highlighted that close-knit communities with bonding social capital can successfully signal residents to return and obtain resources for recovery. For instance, Chamlee-Wright and Storr (2009a) examined how the Vietnamese community in New Orleans East was able to return and rebuild quickly after Hurricane Katrina. Through the leadership and the extensive network

between the leadership and residents of the Mary Queen of Vietnam Church, Father Vien was able to contact displaced residents, encourage them to return, and funnel needed resources into the community. Likewise, Hulbert et al. (2000, 2001) and Aldrich (2011a, 2011b) found similar that bonding social capital was essential to post-disaster recovery in communities after hurricanes and tsunamis, respectively.

Further, communities comprised of weak ties can utilize bridging social capital to coordinate plans and rebuild after a disaster. Storr and Haeffele-Balch (2012) described how the diverse neighborhood of Broadmoor in New Orleans utilized their loose connections through the Broadmoor Improvement Association (BIA) to successfully petition against a proposal to turn their neighborhood into green space by proving that the neighborhood was committed to return and rebuild. Likewise, researchers have found that community after community can rely on their social networks and organizations of self-governance to recover after disasters (Chamlee-Wright 2010; Chamlee-Wright and Storr 2008, 2009b, 2011; Coyne and Lemke 2011, 2012; Grube and Storr 2014).

Following the literature on the importance of social capital in the post-disaster environment, we posit that social learning via innovation and imitation occurs through existing bonding, bridging, and linking social capital. Not only will community leaders seek to encourage residents to return and obtain resources for recovery by tapping into their preexisting social networks and organizations (such as the residents of Broadmoor utilized the BIA), they will also find ways to create new procedures to address pressing problems and imitate the successful actions of others (such as creating a new website for the BIA to post and disseminate information). These entrepreneurial efforts not only occur within the groups

associated with bonding and bridging social capital (such as the Vietnamese and Broadmoor communities, respectively), but also across groups via linking social capital. Said another way, not only are the connections made at church and at the office important, but so are the ties that connect those different groups together. By knowing other community leaders through local government committees and activities, for instance, a community leader from another part of town can call upon, request help, and share information with others pursuing separate recovery efforts. These ties facilitate necessary social learning that can quicken recovery.

This paper contributes to the existing literature on post-disaster recovery by (a) examining how communities utilized existing social capital to address needs and how social learning took place within communities in the Rockaways after Hurricane Sandy and (b) advancing the argument that linking social capital (i.e. the relationships that link different groups together) is a vital mechanism for social learning in the midst of disaster recovery.

These efforts prove vital during the immediate days and weeks after a disaster, when residents are trying to assess damage and determine whether to return and rebuild. The coordination and confidence of community leaders to encourage residents to work together can overcome the uncertainty of the disaster and spur recovery before formal disaster assistance can arrive. Such efforts, which can make the difference between fast and sluggish recovery, can exist before, in place of, or in addition to formal assistance. The experiences in the Rockaways after Hurricane Sandy highlight the variety of social capital and recovery methods utilized in the post-disaster context.

III. Research methodology

The analysis presented in this paper is based on qualitative interviews conducted in an effort to investigate the response and recovery after Hurricane Sandy. Interviews were conducted in the Rockaway, New York in the summer of 2013 and the summer 2014. We focused on the Orthodox Jewish community in Far Rockaway, but also interviewed community leaders from other neighborhoods and organizations in the Rockaways who played an important role in the broader recovery effort. As part of the structured interview, subjects were asked about their personal story of the storm, the characteristics of the community prior to, during, and after the storm, and their involvement in response and recovery efforts. They were also asked the role of family, friends, and businesses and governmental, religious, and other social organizations played in the post-disaster environment.

These interviews allowed us to capture the experiences, emotions, relationships, and thoughts associated with the storm. The individual stories provided information on how relationships and experiences of the community were utilized, adapted, and imitated to coordinate a collective recovery. This discovery process revealed the embedded nature of the Orthodox Jewish community, where residents, all members of different synagogues, are connected by the network of Rabbis, schools, and club goods that the religious leaders provide for their members. Further, we learned how the community engages with others in the broader network of the Rockaways. These insights into the community highlighted the importance of personal relationships and interactions in post-disaster recovery that we could only get from talking to residents and community leaders on the ground.

IV. Social learning in Rockaway, New York

The Rockaway Peninsula is the outer most area of the borough of Queens in New York City. The peninsula was once a popular summer resort getaway for wealthy New Yorkers, but has since become a mixed-income residential area, including numerous public housing units as well as middle- and upper-class residential areas. However, over a third of the seven square miles of land on the peninsula is still dedicated to recreational use and open space, including Fort Tilden and the Rockaway Boardwalk and Beach, and are frequently utilized by New Yorkers seeking a daytrip getaway. The Rockaways population was just under 115,000 people in 2010, and the percentage of the population on income assistance is roughly the same as New York City as a whole, at 35 percent in 2013.¹

Far Rockaway is one of the largest communities on the peninsula, with roughly half of the total population. According to a profile in the New York Times in 2008, Far Rockaway consists of a large immigrant population as well as large Orthodox Jewish community constituting approximately one fifth of the population (Hughes 2008). The community—diverse in terms of race, ethnicity, religion, and income—hosts commuters who work in New York City as well as locals that maintain a relatively isolated life out on the peninsula.

The Orthodox Jewish community has thrived in the area, forming dozens of synagogues, schools, and other organizations. Residents live within walking distance of their synagogue and shop in the local kosher groceries and restaurants. Organizations have been created to help residents abide by the laws of the Torah and navigate medical, legal, and financial issues,

¹ For these statistics and more, see the profile of Queens Community District 14, http://www.nyc.gov/html/dcp/html/neigh_info/qn14_info.shtml.

including the Hatzalah volunteer ambulance service and Achiezer crisis center.² This close-knit community had numerous social networks to rely on after Hurricane Sandy, including network of Rabbis and preexisting organizations like Achiezer. Across town, there are neighborhoods consisting primarily of public housing units and apartment complexes where heterogeneous groups have weak social connections. However, nonprofit organizations, such as the Rockaway Youth Task Force, were able to utilize these weak ties to provide disaster assistance to the community.³

In both groups, community leaders were able to utilize previously established networks and organizations to provide resources and information in the immediate aftermath of the storm. Further, they created new initiatives to tackle pressing problems and imitated the successful efforts of others within their community. As the following examples will highlight, the strong ties of the Orthodox Jewish community enabled them to recovery based on their expertise and relationships without the need of much outside, formal assistance. Further, despite the loosely-connected heterogeneous character of more densely populated neighborhoods, community leaders were able to utilize their existing organizations and imitate the successful efforts of the Orthodox Jewish community to fill the gap of immediate assistance while they waited for formal reinforcements.

² For more information, see <http://www.hatzalahrl.org/> and <http://achiezer.org/>.

³ For more information on the Rockaway Youth Task Force, see <http://rytf.org/>.

a. Altering existing organizational structures

Achiezer and the Community Assistance Fund

Achiezer Community Resource Center a crisis center in Far Rockaway, New York, was established in 2009 as a multi-faceted support center for the Orthodox Jewish community in Far Rockaway. Rabbi Boruch B. Bender, the President and Founder of Achiezer, decided to start the center after experiencing a sudden illness and subsequent surgeries and hospital stays. He realized he could help others navigate the medical system, and soon Achiezer became a one-stop-shop for providing assistance with health, financial, and legal issues. The center incorporates and utilizes the complex network of local rabbis, who refer clients, give advice, and assist the center in providing goods and services to the community.

Whenever unexpected issues arise, people turn to Achiezer for help. As Hurricane Irene approached in 2011, Achiezer received more than 500 phone calls asking for help in preparation of the storm. And Rabbi Bender made sure they could help, working with Hatzalah, the local volunteer ambulance service, to transport 70 disabled and elderly citizens to inland shelters (Bensoussan 2012). While Hurricane Irene did little damage to the area, it became clear that people would turn to Achiezer if a similar crisis arose.

As Hurricane Sandy approached, Rabbi Bender held a meeting at Achiezer with community leaders, organization representatives, and local officials on Sunday afternoon. At the meeting, they discussed contingency plans in case the storm proved more powerful than expected. Achiezer also issued email notifications with information about the storm including road closures, evacuation procedures, reports on damage, as well as resources for response and

recovery. They started out by utilizing their preexisting email database of roughly 9,000 contacts, and over 1,180 people requested to be added to list in the days following the storm.

The next afternoon, as the storm came closer and as the weather got increasingly worse, the phone calls started coming in. That first night, Rabbi Bender estimates that they received 500 phone calls and coordinated rescue efforts as residents dealt with flooding, power outages, and damage. After the Achiezer offices lost power and telephone service, they moved the entire operation to Rabbi Bender's house and set up seventeen phone lines in his dining room. For the next week, Achiezer fielded approximately 1,500 phone calls a day and helped transport over 300 families whose houses had flooded to temporarily relocate to Brooklyn, Queens, and other locations (Bensoussan 2012).

The community's connections with other Orthodox Jewish communities across the country proved vital to getting resources. Three synagogues—the Young Israel of Wavecrest and Bayswater, the White Shul in Far Rockaway, and the Sh'or YOSHUV Institute in Lawrence—started getting volunteers and donations and became relief centers for the community. Achiezer helped field donations, secure generators, and distribute supplies. For example, kosher food came in from Brooklyn, Queens, and upstate New York, gas and generators were delivered from Baltimore, and trucks arrived to take damaged holy books and give them a proper burial, as required by religious doctrine and customs.

In order to coordinate the influx of monetary donations, Achiezer and the Davis Memorial Fund, reinitiated the Community Assistance Fund (CAF) bank account, which had

previously been used to help community members during the recession.⁴ They developed a structure for assessing claims and distributing funds, including opening a separate bank account and recruiting local community members with needed expertise, including a board of trustees, attorneys, an accountant, and a professional fundraiser. The CAF team also enlisted the help of 48 rabbis, located throughout Far Rockaway, to work as representatives to spread the word about the program and help residents apply for funding. The representatives served many functions during the process, often listening to people's stories, providing emotional support, and recommending contractors and vendors. Once residents filled out applications, the representatives submitted them to the board of trustees, who would review the applications and make final decisions on funding.

The CAF program was broken down into three phases.⁵ The first phase, called emergency cash assistance, was \$2,000-3,000 per household for generators and emergency resources. Phase 2, the coming home project, averaged around \$10,000 per household and went toward removing water and mold and other repairs so families could return to their homes as quickly as possible. And finally, phase 3 provided major financial assistance for the rebuilding of home damaged by the storm. Overall, \$11.3 million were raised and distributed to over 1,000 families. Less than a year after the storm, Rabbi Bender expressed pride in his team's ability to raise and distribute the funds quickly and efficiently,

the staggering fact from this, which I am extremely proud of, and I want you to watch the media and the Attorney General speaking about the fact that a lot of

⁴ For more information see this video on CAF: <http://youtu.be/DuVIA6iJ3IQ>.

⁵ For more information, see https://www.achiezer.org/images/news_ad.pdf.

places who raised money for Sandy, but it still didn't get out. We raised it, \$11 million, and we gave out \$11 million and there was no overhead costs.

By utilizing the preexisting organization and networks of the community, Rabbi Bender turned Achiezer into a disaster crisis center that funneled and distributed needed information and resources. This effort was possible given the strength and connections embedded within the Orthodox Jewish community, which utilized both the bonding and bridging social capital as Achiezer relied upon the close-knit organization of rabbis to implement CAF to their various congregations.

Young Israel Relief Center

Within a day after the storm, the Young Israel of Wavecrest and Bayswater transformed into a relief center for the Bayswater community, where residents could get hot meals and supplies, access power and the internet, and coordinate efforts clear debris and repair their homes. The synagogue is in many ways the center of the community, and was the logical place for residents to turn to after a disaster.

Shainde Russell, or Mrs. Russell as she referred to by her neighbors, is a longtime resident of Bayswater. The morning after Sandy hit, she realized her house wasn't flooded and went for a walk with a friend to check out the rest of the neighborhood. They came upon Agudas Yisroel of Bayswater and mourned the devastation of the synagogue and holy books. It was then that she realized the damage inflicted on her neighborhood. In a piece for Jewish Action, Mrs. Russell (2013) recalled, "That's when it hit me: my house was fine, my family was fine, but my neighborhood wasn't. I had to help." They then went to Young Israel and spoke to

the Rabbi about addressing the need to provide electricity and food. As Mrs. Russell recalls, "I said, 'You are going to have a food issue.' So he goes, 'Okay, we are opening a food pantry and you are in-charge.' So I was like, 'Okay, no problem.'"

Mrs. Russell got right to work preparing the kitchen and calling in requests for donations. She explained that within a few hours they received food from the Jewish Community Council, and by the third or fourth day they were serving 300-400 people three hot meals a day as well as snacks. She received food from catering companies in Brooklyn, and could place orders for fresh produce and other goods from a local grocery store. Mrs. Russell and three of her friends ran the kitchen from 7am to midnight every day for two weeks. They set up the food, cleared dishes, and talked with residents.

Young Israel became a needed social space, not just a place to receive food and supplies. As Mrs. Russell recalls, "Anybody who needed anything was welcome to come in and we made people feel that way. And we were just – the word got out through lots of phone calls that we were the resource in the area." In between meals, Mrs. Russell and her friends would talk to the other residents, providing emotional support and sharing information, including how to apply for CAF assistance. When spirits were down, Mrs. Russell helped people cope by bringing up imagery of summer camp. She recalled that, "I told everybody, 'Okay guys, when the chips are down this is summer camp, sing, just stay happy.'"

Further, the Rockaway Citizen Safety Patrol (RCSP), a volunteer group in Bayswater and Far Rockaway, set up their headquarters at Young Israel to aid the recovery effort. While the RCSP is a primarily Jewish organization, they are concerned with the overall safety of the community and patrol the entire neighborhood and maintain a 24-hour hotline. As Laizer

Shtundel, the founder of the RCSP explains, “One of the benefits of having a citizen’s patrol is that we know our neighbors and we know what is out of the ordinary. If I see a stranger in a car that I know belongs to my neighbor, I do not have to think twice about calling the police” (The Wave 2013).

The RCSP expanded their role in the community in the days before and after Sandy. Volunteers helped to evacuate sick and elderly individuals in the community prior to storm, and helped to distribute hot food prepared in the kitchen by Mrs. Russell and coordinate debris, water, and mold removal in the weeks following the storm. They also extended patrol hours to cover the neighborhood 24/7. While many areas in the Rockaways were without power and suffered from looting, the Bayswater community did not suffer from those issues thanks to the efforts of the RCSP.

As the recovery effort went on, and more and more goods and services were funneled through Young Israel, the Rabbi asked a resident, Tom Schmitz[†], to oversee and coordinate operations.⁶ Smith mediated between the Red Cross, National Guard, and other groups that came to Bayswater and wanted to donate or help with the recovery effort in some way.

Young Israel quickly became the hub for disaster relief and recovery in Bayswater. The preexisting organizational structure of the synagogue and its members enabled an easy transition to provide goods and services after the storm. Further, the community leaders, including Mrs. Russell, Shtundel, Schmitz, and others, stepped up to fulfil the immediate and

⁶ Whenever appropriate, we use pseudonyms for our interview subjects, which are denoted with the [†] symbol.

longer term recovery needs of the community. Their efforts exemplify the importance of bonding social capital to facilitate post-disaster recovery.

The Rockaway Youth Task Force Distribution Center

Across town, families and elderly residents were stuck without electricity and hot water in a neighborhood of densely populated apartment complexes and public housing units. Milan Taylor, the founder and president of the Rockaway Youth Task Force (RYTF), realized he could help his community in the days immediately following the storm. Taylor started RYTF in 2011 in order to encourage young residents of the Rockaways to engage in civic and community affairs in order to address social ills, such as gang violence, teen pregnancies, and unemployment. Taylor, a college student raised in the Rockaways, was able to use his interest in his community and criminal justice to inspire others to do the same. After Hurricane Sandy, Taylor utilized his connections and experiences from RYTF, including his prior community disaster response training, to provide resources to the community.

Taylor evacuated for the storm, but returned the next morning and immediately went to work. He arranged to start a distribution center in the space of a local co-op, and used social networks to ask for volunteers and donations. Within three days, Taylor and over 100 volunteers were distributing bags with two days' worth of supplies to residents in three large apartment complexes (Miller 2012). As one RYTF member, Shalaka Cox told CBS News, "There's times when it might be overwhelming but then I think about what we're actually doing. I think in the last few days we've been able to reach over 500 families, so knowing that

keeps me going" (Miller 2012). The distribution center operated for about a week, until the electricity was restored to the neighborhood.

Because of the RYTF's familiarity with the community, they realized that many of the residents, particularly the elderly, would have a difficult time climbing the dark stairwells of their apartment complexes in order to go to the National Guard and FEMA distribution centers. Instead, they decided to bring supplies to the residents. Taylor recalled,

[P]art of what I saw, when we were collecting the food from the National Guard...a lot of people were standing on lines for this food. And I just thought about, okay if you are an elderly or disabled person, how are you getting the food, so we actually weren't a traditional distribution site. What we did is we worked in two phases, the first phase, we did a canvas, where we knocked on door-to-door and we saw who needed goods and services. And then on the second visit, which we did the same day, we kind of created a checklist for each household. And then we went back and created custom [bags] for them.

During that week, Taylor proved that he knew the needs of the community and could provide the local knowledge needed to obtain and distribute resources, highlighting the importance of bridging social capital in loosely-connected, heterogeneous groups. In an interview with CBS News, Taylor concluded that, "There is no community leadership guiding FEMA, guiding the Red Cross, because they're not from this community, so they don't know where the needs are" (Miller 2012). And in the months following the storm, Taylor worked a liaison for the Red Cross in an effort to share his experiences and lessons from the storm.

b. Innovation and imitation from within and outside of the community

Implementing the Community Assistance Fund

As mentioned previously, the Community Assistant Fund (CAF) was organized by Achiezer and the Davis Memorial Fund. They enlisted the help of 48 rabbis to spread the word about the fund and help residents with applications. Once applications were submitted, the board of trustees would review and approve requests for funding. While CAF was structured to ensure that the funds were handled appropriately and distributed to residents in need, they also relied on local rabbis to implement the fund in their neighborhoods. The decentralized nature of using representatives allowed for innovation in how rabbis disseminated information about the fund and collected applications.

The story of Rabbi Mordechai Kruger, a rabbi at the Agudas Yisroel of Bayswater and CAF representative for the Bayswater community, exemplifies the innovations that came about of implementing the fund. Rabbi Kruger's prior experience and personal relationships with his community enabled him to not only get residents to sign up for CAF but to also find new ways of collecting data on the interests and needs the community.

Starting in 2002, Rabbi Kruger founded the Bayswater Neighbors Fund to provide short-term support for those in need. The small donations are intended to help families purchase food for holidays, pay their monthly bills, or cover tuition for school. While Rabbi Kruger relies on other members of the community to observe when someone needs help and consults the rabbis in the community for guidance, he aims to keep the donations and distributions anonymous. The residents of Bayswater trust him to distribute the funds to worthy families who are trying to be responsible and get back on their feet. Additionally, he has worked as a case worker for

Met Council and now is a director of a nonprofit that helps Jewish adults identify their career goals and gain the training and experience needed to fulfil their goals.

In the aftermath of Hurricane Sandy, Rabbi Kruger utilized his experience and skillset to help the Bayswater community recover. He recalls how he assumed the position of representing Bayswater for CAF, “after 36 hours [Achiezer] were asking these volunteers to coordinate distributions of funds, and I don’t know if anybody told me to go, I just kind of showed up...[and said] okay, I will do it.” The trust he had built in the community helped him reach out to those who needed help. Rabbi Kruger noted that,

Sandy was very equal opportunity and nobody did anything wrong but people were very embarrassed. So trust and comfort and being willing to talk about your loses, it’s not easy, so we...mobilize[d] people who already had trust in the community, the rabbis, other community activists, whatever I had been doing, that definitely makes the whole thing easier.

By utilizing trusted members of the community, Rabbi Kruger was able to spread the word about CAF, encourage applications, and help the community receive the supplies and resources it needed to recover. He worked with a couple in the neighborhood to build a spreadsheet that would help assess needs of the community. They developed a list of needed goods, surveyed the neighborhood, and documented stated needs in the spreadsheet, which was then used to match with incoming donations and coordinate purchases. For example, if someone wanted to donate mattresses, Rabbi Kruger could look at the spreadsheet to see how many mattresses were destroyed in the storm. Rabbi Kruger explained the benefits of the spreadsheet,

What that ended up doing was that there were fund givers who would come forward with specific interests...[W]e were able to pull that information...we can tell you how many of those we need...[T]hat made it a lot easier to approach funders and it really sped up the relief effort.

Rabbi Kruger also relied on the volunteers at the relief center at Young Israel of Wavecrest and Bayswater, to talk to residents and encourage them to apply for resources. They helped spread the word about CAF by sending emails, handing out fliers, and checking on the elderly by going door-to-door. In particular, Rabbi Kruger relied on Mrs. Russell, who ran the kitchen at Young Israel after the storm. He frequently relies on her connection to the community to determine which families need help and should receive funds from the Bayswater Neighborhood Fund, and did the same when spreading the word about CAF after Hurricane Sandy. As Mrs. Russell recalled, “[Rabbi Kruger] saw that I really had that in control so then he goes, ‘Do me a favor, I have these applications. Can you work the crowd and find out who needs money and whose houses were destroyed and we can get them the money.’” So after the food was served and people were eating and socializing, Mrs. Russell would walk around and talk to residents about CAF. “I was able to work the crowd and make sure that people filled out applications and I had to convince some people because they didn’t want to take from anybody,” she said.

Additionally, when other residents in the community came up with innovative ways to obtain resources, Rabbi Kruger made sure to encourage their efforts. One Bayswater resident, Tobias Cohen[†], realized that since his house had flooded and would need repairs and new equipment, his neighbors on his street were most likely all facing the same situation. So he

decided to try to purchase equipment and arrange for repairs in bulk. Cohen, an accountant with clients in property management, used his contacts and called wholesalers and contractors to arrange for bulk purchases and services. This enabled the neighborhood to get equipment at a discount and entice contractors by offering a week's worth of work instead of piecemeal jobs. Rabbi Kruger realized the benefit this had for the community, recalling that, "you had ten people who would hire a guy who would do all of our boilers so they would bring a crew and would work house, house, house, house and it lowered the cost and that worked really well."

The innovations in Bayswater—including documenting needs on a spreadsheet, purchasing equipment and repair services in bulk, and utilizing Mrs. Russell and other trusted community members to spread the word about CAF—were communicated to the broader Orthodox Jewish community in CAF meetings at Achiezer. Rabbi Kruger explained that initially, no one really knew what to do,

[T]here was a huge amount of learning because nobody knew how to do this stuff. It wasn't like we had practiced drills, and we originally sat in a room and just kind of looked at each other, we didn't really know what to do...and so Achiezer and the community assistance fund said okay, we are going to start raising money we don't really know how much we are going to get but try to get a sense of what you'll need and we'll see what happens.

And as people came across problems or discovered useful resources and procedures, they discussed them with one another. As Rabbi Kruger recollected,

Well, Achiezer was the nexus of everything and there were regular meetings there to get together and talk about what has happened, what can we do next,

what are going to be the guidelines for the funds that are available, so I remember being there in the dark sitting there by candlelight and there was an enormous amount of respect and willingness to listen and that was extremely important because none of us knew what we were doing...Everybody was given a chance to ask whatever was on your mind, talk to anybody, nobody was rushing out...That was extremely important.

Rabbi Kruger and his team of trusted neighbors were able to tap into the bonding social capital in Bayswater in order to develop new procedures for assessing damages, disseminating information about CAF, and coordinating repairs.

The White Shul Relief Center

As mentioned previously, three synagogues became resource centers that provided warm meals, clothing, generators, and other needed goods and services. These resource centers served as focal points, where residents could talk to neighbors, get supplies, and coordinate repairs. While the center at Young Israel was up and running within a day of the storm, the White Shul in Far Rockaway was not utilized as a relief center right away, but rather became one as the week went on and residents realized they needed to address the pressing issues of a prolonged lack of electricity, supplies, and schooling. Like Young Israel, the White Shul was the logical location to gather since it was in many ways the spiritual and cultural center of the Orthodox Jewish community.

While Chaim Leibtag, the president at the White Shul, had lived and worked in the Far Rockaway Orthodox Jewish community for decades, he was new to his position at the

synagogue. However, this did not stop him from jumping right in and working with others in the community to turn the synagogue into a relief center. His first call was to the rabbi at Young Israel, who could help him find contacts for generators, food, clothing, and other donations. By utilizing his network in the community, Leibtag was able to imitate the successful efforts of the Young Israel, and in short order they White Shul was up and running as a relief center.

They were able to borrow a spare generator from Young Israel, and quickly set up outdoor lighting typically used for holidays, a charging station, and even hooked up a wireless internet connection so members of the congregation could use the internet to check on family and request supplies and services. Then food and clothing started coming in, including fresh groceries donated by a local grocer. Volunteers and residents began cooking hot meals, serving roughly 300 meals three times a day, and setting up space to distribute supplies.

Once the relief center was established, Leibtag and other volunteers found new ways to handle donations and provide services to the community. For instance, a truck of gasoline was arranged to stop at the synagogue. First, when someone from Maryland offered to pay for a bus to take people who wanted get away down south, Leibtag asked them to return the empty bus with gasoline containers. He then emailed out instructions to the congregation, setting up times to pick up filled containers of gas, giving first priority to emergency personnel and then fulfilling the needs of residents. The distribution went smoothly and provided needed fuel to run generators and equipment for repairs.

As the adults dealt with relief and rebuilding efforts, the children of the congregation were getting restless. Leibtag worked with some parents and teenage volunteers to set up activities, lessons, and entertainment. These activities went well into the evening each night and

was a welcome break for the adults who were dealing with clearing debris, draining floodwater, and rebuilding their homes.

Leibtag then worked with a local pediatrician to set up a clinic in the White Shul. Dr. Hylton Lightman's office suffered over five feet of flood water and sewage. Fortunately, he and his wife had prepared by storing their vaccine inventory and computer with electronic records during the storm and could easily set up shop in a temporary location. As Dr. Lightman (2013) recalled, "Within seventy-two hours of Mr. Leibtag's offer, we were fully operational." Dr. Lightman ended up staying at the White Shul for six months while his office was gutted and rebuilt.

And, when FEMA arrived two weeks after the storm, they set up an information center in the White Shul since it was the place where residents came for food, resources, and information. According to Leibtag, the National Guard also came by around two weeks into recovery and offered a truck load of food. Since they already had food service, Leibtag offered the additional supplies to a local church.

By being flexible and utilizing his connections in the community, Leibtag ensured that the congregation had the support they needed to recover. He relied on his social network to learn from the Young Israel relief center and was innovative when new opportunities and issues arose. Further, he shared these lessons and resources with organizations outside of the Orthodox Jewish community. Leibtag's access to both bonding and bridging social capital was essential in learning how to establish a relief center after the storm.

Improving the Rockaway Youth Task Force Distribution Center

As highlighted in the previous section, Milan Taylor and the Rockaway Youth Task Force (RYTF) utilized their existing social networks to mobilize a distribution with delivery service after Hurricane Sandy. Taylor recognized the challenges that traditional distributions centers faced and altered his operation to better serve the needs of the community. Further, he surveyed other relief and recovery efforts and imitated useful aspects of their operations.

For instance, Taylor decided to drive through other neighborhoods and survey the damage of the peninsula. When he drove through Bayswater, he realized that many homes had generators within days of the storm. Since he knew some of the Orthodox Jewish community leaders from civic organizations and meetings, he stopped by Young Israel and was impressed by their operations. When he got back to the distribution center, he imitated their organizational system and started using walkie-talkies like he saw being used at Young Israel.

Taylor was able to alter the typical organization of distributional center in order to fulfill the needs of residents stranded in large apartment complexes after the storm, and to imitate useful practices from the efforts of the Orthodox Jewish community. While they provided support for different communities in the Rockaways, Taylor was able to observe and imitate the close-knit group of the Orthodox Jewish community in order to provide better services to his own loosely-connected neighborhood. Taylor's efforts exemplify how linking social capital can be accessed to enhance recovery after a disaster.

V. Implications and conclusion

After a disaster, communities are faced with limited resources and uncertainty. Whether residents evacuate and have to determine when to return or if they stay and have to find ways to obtain resources while they wait for services to be restored, communities rely on one another to signal and coordinate return and recovery efforts. After Hurricane Sandy, the Rockaways suffered from flooding, wind damage, and prolonged power outages. Despite this, community leaders in neighborhoods throughout the peninsula were able to coordinate relief and recovery efforts by utilizing their preexisting social networks and engaging in entrepreneurial acts that allowed for social learning to take place. In the post-disaster context, social learning—which takes place across bonding, bridging, and linking forms of social capital—occurs when communities are able to (a) adapt existing organization structures and (b) create new procedures and imitate the successful actions of others in order to spur recovery.

The examples in the previous section highlight the ways in which groups in the Rockaways were able to utilize previously established social networks to provide resources and information, created new initiatives to tackle pressing problems, and imitated the successful efforts of others within their community. The strong ties of the Orthodox Jewish community, coordinated through the extensive network of rabbis, enabled them to obtain resources and recover without the need of much outside, formal assistance. Further, despite the loosely-connected heterogeneous character of more densely populated neighborhoods, community leaders such as Milan Taylor and the Rockaway Youth Task Force, were able to utilize their existing connections, develop new ways of distributing resources in their community, and

imitate the successful efforts of other groups in order to fill the gap of immediate assistance while they waited for formal reinforcements.

This paper shows that communities in the Rockaways, comprised of both close-knit and loosely-connected social networks, were able to utilize their relationships in order to spur recovery after Hurricane Sandy. Additionally, community leaders in areas with weak ties can observe and imitate the efforts of close-knit groups in order to better serve their community. Further, they can provide resources and coordinate recovery in ways that address the specific needs of the community, often faster than formal disaster assistance. This analysis highlights how communities utilize bonding, bridging, and linking social capital amidst the uncertainty of the post-disaster context.

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