Picking Up the Pieces: Social Capital, Psycho-Social Support and Livelihood Recovery of Displaced Populations in Northeast Nigeria

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1. Introduction

In recent years, conversations have intensified among humanitarian scholars and practitioners on the need to rethink habitual approaches to humanitarian action. Both have highlighted the facts that the humanitarian landscape has changed significantly over recent decades, particularly in the proliferation of protracted crises, and that much humanitarian programming fails to adjust to new realities (Kälin and Chapuisat, 2018; Kjeldsberg, 2017). One particular recent thrust has been to advocate changing the paradigm of crisis-affected people from passive aid recipients to prime agents of their own survival and recovery, and to adapt aid methods accordingly (United Nations Secretariat, 2016). Yet there is a paucity of studies exploring affected people's use of individual and social resources in their crisis response, and of novel approaches that adapt external aid thereto – particularly for protracted crises. Individual resources refer to an aggregate of knowledge, skills and experience that individuals bring to bear in the recovery efforts and activities before and after displacement. Social resources refer to the aggregate of intangible resources accrued through networks of relationships within, as well as outside, members of their ethnic and religious groups. Both individual and social resources are distinct from material and physical resources such as food items, medical supplies, temporary shelters and other physical facilities. The present study anchors around the case of forced displacement resulting from the Boko Haram insurgency in Northeast Nigeria to empirically draw attention to the likely importance of social capital – a main form of social resource – in humanitarian action on the African context.

Given that most forced displacements occur in developing countries like Nigeria, government resources are increasingly stretched to deal with such crises, and there are calls for fundamental rethinks of the ingrained approach to large-scale humanitarian response to disasters, whether natural or manmade. In particular, scholars and practitioners are highlighting the need to shift from the current emphasis on material and financial input, to an approach that combines both material and social solutions, bringing people and communities to the forefront of interventions (Aldrich et al., 2020; Wind and Komproe, 2012). Forced displacement entails social processes in which individual agency and social networks play a major part. These networks can be instrumental in the construction and (re)-construction of livelihood systems and communities shattered by protracted conflicts.

According to estimates, at one point, up to 3.3 million people were internally displaced by terrorist violence by Boko Haram (Internal Displacement Monitoring Centre, 2015). The number of people displaced by this conflict is the largest in Africa and the third largest in the world, and has generated a major national and international humanitarian response. However, international aid has mainly featured the habitual blend of materials and basic services, with only limited attention to the affected people's individual and social resources. This study, using qualitative and quantitative data obtained from interviews with respondents in Northeast Nigeria, aims to narrow the gap in knowledge by examining the extent to which the displaced people are drawing on social capital to withstand, cope with and recover from the adverse consequences of the crisis. Addressing this lacuna, our study was guided by the research

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question: *how does social capital improve the livelihoods and well-being of forcibly displaced people*?

In this paper, we raise two related research questions: 1) What is the impact of social capital, as mediated by resilience and mental health and reinforced with human capital (a main form of individual resource), on the livelihood outcomes of displaced households? 2) How do findings on the above question help to inform a new, 'triple-nexus' (humanitarian-development-peacebuilding) approach to humanitarian action? Thus, this paper makes two principal contributions, one empirical, the other conceptual. First it highlights specific empirical insights around how social capital serves as a channel of psycho-social support, resilience and mental health towards the achievement of livelihood outcomes. By so doing, we build on previous studies (cited below) that argued that these factors are critical for livelihood recovery and well-being. Second, the paper contributes to recent efforts (Howe, 2019) to crystallize a conceptual framework of the triple nexus approach – the experimental concertation of humanitarian, developmental and peace-building actions in protracted crises – which has gained attention in the wake of the United Nations' New Way of Working (UN-OCHA, 2017). The paper thus contributes by focusing on a context of protracted internal displacement – the type of context where arguably the triple nexus is most needed – and showing how social capital can mitigate the harm of displacement and be at the heart of operationalising the triple nexus in such contexts.

The paper is organized as follows: section 2 sets out the theoretical background of the study, under the sub-themes of social capital in disaster or forced-displacement contexts (including resilience, psycho-social support and mental health, and livelihoods), and social capital in the triple nexus. Following that is a description of the empirical context in section 3, and the methodology in section 4. Section 5 present the findings and discussions, followed by conclusion and recommendation in section 6.

2. Theoretical framework

2.1 Social capital in disaster or forced-displacement contexts

Social capital has been defined as "the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (Bourdieu and Wacquant, 1992, p.119). Putnam (1996) noted the theory of social capital usually attempts to describe the forces that shape the quality and quantity of social interactions and social institutions, and as the glue that holds societies together even in difficult situations. Social capital has been disaggregated into structural, relational and cognitive dimensions (Camps and Marques, 2014). It has also been categorised into bonding social capital among people with similar socio-economic characteristics and familial and religious identities; bridging social capital among people belonging to different ethnic, social and religious groupings; and linking social capital between ordinary citizens and those with authority (Claridge, 2013).

Recent studies in disaster management and response have highlighted the importance of social capital as a potentially key resource in humanitarian response (Chan et al., 2019; Quetulio-Navarra et al., 2013). People thrust into vulnerable situations can use social capital for access to livelihoods or for cost-saving measures, or as a form of basic social insurance (Uzelac et al., 2018). Social networks are also potential channels of critical information that can help individuals and communities prepare for and respond to crises.

Humanitarian response tends, by default, to focus on short-term and tangible actions such as first aid and supply of urgent relief materials, with commensurately short-term objectives. However, crises increasingly tend to become protracted due to persistent root causes that are often outside the humanitarian domain – most obviously conflict, and also political factors such

as weak governance or youth disenfranchisement, or socio-economic factors such as unemployment, illiteracy and poverty. There is therefore a need for research that focuses on social factors, whether inherent or mutable, that might enable or accelerate long-term recovery as well as improving short- or medium-term coping.

Evidence to date on the effects of social capital on livelihood recovery for the displaced- though more often incidental findings than the result of focused research on the issue- is mounting. In one focused study, varying manifestations and levels of social capital among refugees of different nationalities in Jordan, and between them and Jordanian host communities, suggested potentially fruitful interventions to reinforce it and/or exploit its potential for boosting livelihoods and well-being (Calhoun, 2010). A quantitative study of Syrian refugee households in Turkey found that 'the most important factors in determining refugees' economic adaptation are human capital, social capital and institutions.' (Abedtalas et al., 2020, p.1) Crawford et al. (2015, p.2) detect '…a better appreciation of how market forces and the connectedness of displaced people—amplified by their social capital—have allowed them in some contexts to achieve positive livelihood outcomes.'

A qualitative study articulated the attenuation of social capital and networks over time among Syrian refugees in Jordan and its probable interactions with livelihoods and psychological well-being:

> The collapse of social networks exacts a massive toll on displaced Syrians in Jordan. This can be measured in a loss of the economic support networks which traditionally tied households through unexpected shocks…But most importantly, the collapse of social networks among Syrians has exacerbated and accelerated the very human hardships of loneliness, boredom and depression. All too often, these intangible challenges are ignored in favour of more empirical targets such as shelter, poverty and hunger, while evidence for the structural links between these two broad categories of challenges are ignored… (Stevens, 2016, p.60)

Despite the latter's suggestion, the mechanisms or mediating factors by which social capital may influence livelihood outcomes among crisis-affected people remain little explored. Our study addresses this gap by investigating the role of resilience and mental health as possible mediating factors between social capital and livelihood recovery. For further insight, we disaggregate social capital into two forms—bonding, and bridging-linking (more on this in section 4.3).

We also introduce human capital as a possible explanatory variable, because of its likely effect on displaced people's livelihoods and its interactions with other variables. While it is not the study's main focus, the introduction of human capital enable us to elucidate the interaction between knowledge and capabilities developed at the individual level and the sum of resources aggregated and distributed through networks of relationships. Human capital has been defined as 'the knowledge and skills that people acquire through education and training as being a form of capital' (Nafukho et al., 2004, p.547). The concept also entails 'the aggregation of the innate potentials and the knowledge and skills that individuals acquire and develop throughout their lifetime' (Laroche & Ruggieri, 1999, p.89). While displacement is disruptive and detrimental, the displaced people bring with them skills, education, or knowledge they already have. Forced displacement also brings people into situations in which they meet new people, either those displaced from other places or members of the host community. These could expand the pool of human capital, as well as afford bonding, bridging and/or linking social capital.

While ample studies (cited above) have investigated the impact of social capital on mental health, there is relatively little empirical evidence on the relationship between human capital and mental health (Gao et al., 2010). Fewer studies still have distinguished the impacts of human and social capital on mental health outcomes, even though a number of scholars have suggested that education (a main component of human capital) can shape social capital such

that its impact on health outcomes can be absolute (OECD, 2010). Psycho-social programmes that are sensitive to these available potential capitals may be the best fit for displaced populations: for example when displaced people are supported to take charge of their lives by empowering them to use their skills, their daily functioning improves and their mental health is boosted (Quosh, 2013). To the best of our knowledge, our study is the first to examine the impact of social and human capital on mental health outcomes in a context of forced displacement.

Human capital is necessary in our model as an exogenous variable (see section 4.3), because it inheres in the individual (and thus matches our individual-level outcome measurements), and it is likely a co-determinant of livelihood outcomes. However, as our study aims to improve aid methods, it is secondary to social capital as a focus, because we postulate that it is less mutable (being accrued over the individual's lifetime) in the short and medium terms by humanitarian aid interventions than social capital may be. Furthermore, in situations like forced displacement, human capital may be more reliant on social capital and other factors to manifest and optimise its usual benefits. In crisis settings, individual require more than their own wits but often on support from, and cooperation with, others.

Resilience

Resilience is by definition a factor in recovery: a typical definition relevant to disaster risk is the "capacity of individuals, communities and institutions to anticipate, prepare for, resist, withstand, adapt to, transform and recover from crises' (UNDG, 2018, p.9). Several studies have examined the impact of social capital on resilience, at the community, individual or household levels. Recovery from physical damage is faster in households that can draw on practical and logistical support from neighbours (Sadri et al., 2018). Beyond physical recovery, resilience essentially entails a psychological process of re-orientation in which social capital plays a key role (Cox and Perry, 2011). This may especially be true for the forcibly displaced who, in addition to material losses, have to contend with distress, disorientation, and abrupt severance of social ties, as forced displacement often disperses the community.

Much of the discourse on protracted humanitarian crises, and on the triple nexus (see section 2.2 below) in which hopes are invested for better addressing these crises, emphasizes resilience, usually as an intermediate objective between emergency relief and development. However that usage refers not so much to psychological resilience (as in e.g. Fleming & Ledogar, 2008), but rather the broader range of material and other factors composing the individual and group ability to withstand shock (as per UNDG, cited above). For our study we choose the more bounded psychological conception, to better elucidate the possible effects of human and social capital.

Mental health

The coerced movement of people away from their homes or regions in flight from conflicts to somewhere safer is known in the literature as a risk factor for mental health and psycho-social problems (Lee et al., 2018). Forced displacement – usually entailing separation from friends and family, interpersonal tensions and loss of employment – could induce intense psychological distress in otherwise healthy individuals.

Humanitarian efforts for forcibly displaced people often fail to appreciate the extent of repercussions on their mental health, and the risks of intense psychological distress that displaced people could encounter (Siriwardhana et al., 2013). Yet the need to address mental ill health in crisis situations with psycho-social interventions has considerable empirical and theoretical support (Quosh, 2013). Most forcibly displaced people are located in low-income countries with limited resources for mental health care (Silove et al., 2017). Moreover, problems with help-seeking behaviour, stigma, mistrust and lack of knowledge of services-

common situations in low-income countries can deter accessing any available mental health services (Morina, 2018).

One of the main channels through which social capital may contribute to long-term recovery of displaced populations is likely to be its role in providing critical psycho-social support for individuals and households. This support might be significant for mental health outcomes and long-term recovery, and thus requires theoretical discussion and empirical investigation in forced-displacement contexts. Many studies have detected effects of social capital on mental health, of which the majority report a positive impact (for example Almedom and Glandon, 2008; Harpham et al., 2004). Relatively little research has focused on social capital and mental health in displacement or other protracted-crisis settings; yet these settings produce some of the worst stressors on mental health.

Psycho-social programmes that thus may revive the sense of connectedness, rekindle social networks and promote self-help actions have more potential for effectiveness, insofar as they may generate a positive feedback loop in which they catalyse human and social capital, which in turn boost psycho-social support and mental health.

There is a need for more empirical data on the mechanisms through which social capital can influence long-term livelihood recovery and re-settlement strategies. Thus, our study seeks to cast light on whether resilience and/or mental health mediates the putative impact of social capital on livelihood outcomes in a displacement context. (We posit that, in a humanitarian crisis, mental health is both a desirable outcome in itself and an enabler of others such as livelihood recovery.) This is captured in the following hypotheses, referring to forced-displacement contexts:

> Human capital ($H_{1)}$, bonding social capital ($H_{2)}$, and bridging-linking social capital (H_3) have significant positive impacts on livelihood outcomes but are mediated through resilience and mental health.

By incorporating both human capital and social capital in our model, with due caution for the inherent difficulty of modelling and measuring these dynamic processes, we aim to examine whether both have significant effects on mental health outcomes—and thereby possibly on livelihoods—or if the impact of one supplants that of the other.

2.2 Towards a social-capital-centred triple nexus for livelihood recovery among the displaced

Mental health and livelihoods for displaced people are frequently indicators and objectives of humanitarian action; therefore if social capital influences them, it may help attain humanitarian objectives. However, it can also help solidify the theory and operationalisation of the 'triple nexus' (concerted humanitarian, developmental and peace-building actions in protracted crises–most of which feature forced displacement). We understand the rationale of the nexus, whether double or triple, to be that actions in one sector enable, complement or solidify those in the other(s), and therefore the sectors are interdependent (or even share some objectives). An action that facilitates more than one sector's objective operationalises the nexus. This paper contributes to theory and builds on Howe's (2019) framework (figure 1) by putting social capital at the heart of the triple nexus' operationalisation. Our modified triple-nexus framework highlights how social capital both interacts with each of the three distinct sectors that the nexus combines, and also integrates and links them together in mutually reinforcing arrays of actions.

In this modified framework, social capital is positioned as a main part of the operational links between the vertices, thereby shaping the activities in each of the double nexuses. This underlines the accepted but less operationalised maxim that affected people themselves, not externally sourced materials, are the critical resources at the heart of effective humanitarian

action. In the humanitarian-development nexus, operationalised social capital could take forms such as:

- management of displacement and resettlement sites that maximizes opportunities for social networking (either maintaining pre-crisis contacts or building positive new ones) (Ward et al., 2020);
- the community-based psycho-social support essential for affected people to overcome the trauma of displacement and pass the mental threshold where they can maintain themselves while displaced and be ready to return or resettle;
- networking for sharing information, knowledge and skills (Ansari et al., 2012; Lefebvre et al., 2016); and
- bridging and linking networks for the formation and development of new markets (Lindstrand and Hånell, 2017) that can afford livelihoods during and after displacement.

In the development-peace nexus, programmes integrating social capital may afford:

- networking and cooperation within the displaced populations, and with the host communities, which can be critical for lowering outgroup prejudice and ingroup bias, two key factors that often precipitate or aggravate conflicts (Tobias et al., 2013); and
- promotion of communal and inter-communal responsibility for resource management and optimal sharing of scarce social infrastructure and services.

In the humanitarian-peace nexus, operationalising social capital might:

- afford better access by humanitarian agencies to insecure zones through inter-communal trust-building; and
- help defuse conflict between displaced people and nearby communities through, for example, cooperation on resource management and equitable access to essential services that fall to humanitarian agencies to provide.

These examples invoke two-way combinations, for clarity. However, examples of social capital in more complex interventions that concert all three sectors can also be imagined (bearing in mind that concerted triple-nexus interventions of any kind are still a novelty). An illustrative scenario is durable solutions for displaced people – classically either return to areas of origin, or (in cases where displacement seems indefinite because its causes are unresolved) permanent integration in or alongside the host community or resettlement in third locations. Such undertakings seem likely to need inputs from all three sectors--humanitarian, for immediate support through the difficult move and period of establishment; development, to install durable social and market infrastructure and services; and peace-building, to introduce or solidify norms and practices that defuse potential tensions between residents and newcomers. If the resulting array of programming keeps at its common core an attunement to the formerly displaced people's social capital, this may help cohere the programming in addition to strengthening each sector's effects. For example, in this scenario:

1. Bonding social capital among displaced people returning, integrating or re-settling may afford better resilience (in various senses) and mental health, thus boosting willingness and confidence in undertaking the move successfully and improving the chances of establishing livelihoods and other requisites of a durable solution to displacement.
2. Promotion of bridging social capital in this scenario would mean bringing formerly displaced communities together with host (if integrating) or neighbouring (if returning or resettling) communities, and also perhaps maintaining links with former host communities. The latter may particularly help livelihoods for the formerly displaced who return or resettle, capitalizing on whatever market connections and information flows they acquired during displacement. Links with those not members of the

displaced community but still in proximity – hosts and neighbours – can similarly help livelihoods but may particularly serve a peace-building function, in fomenting inter-communal social cohesion, relaxing outgroup bias, and defusing potential tensions such as competition over scarce resources and services.

3. To the extent that linking social capital may improve governance (Tavits, 2006), concerted tripartite efforts that optimize linking social capital may thereby generate tangible benefits for integrating, returning or resettling people comprising justice, peace and rule of law; access to and quality of services, as their provision phases over from humanitarian to state actors; and recrudescent market functions that facilitate livelihoods.

In sum, one can envision aid programmes whose objective is some multi-dimensional requisite of durable solutions such as livelihoods, that by attuning to and perhaps massaging the various facets of social capital can cohere otherwise disparate aid interventions to advance the objective's humanitarian, developmental and peace-building dimensions.

Whether aid interventions can intentionally foster social capital--a step beyond merely attuning to and exploiting it--is not a settled question; evidence to date is discouraging but not nugatory (Pronyk et al., 2008; Ogden et al., 2014). However, such interventions in crisis settings are essentially untried and untested, and one could postulate that programming to restore or replace a measure of the social capital disrupted by displacement would be more likely to succeed than that to boost social capital in placid situations.

Strong social capital can also have negative effects, for example through exclusion of members of the outgroup and information-hoarding within the in-group (Bhandari, 2014). Therefore, the recent interest in social capital in humanitarian situations should not uncritically assume that social capital, in its various forms, is inherently positive for the welfare of displaced people. Humanitarian actions should thus aim to not just harness but also, where necessary, modulate social capital. Such critical engagement may be particularly important in man-made disasters: conflict situations typically associate with negative social capital and low levels of human capital, and these are often inter-linked with in-group bias, outgroup prejudice, and other factors that precipitate and aggravate inter-group conflicts.

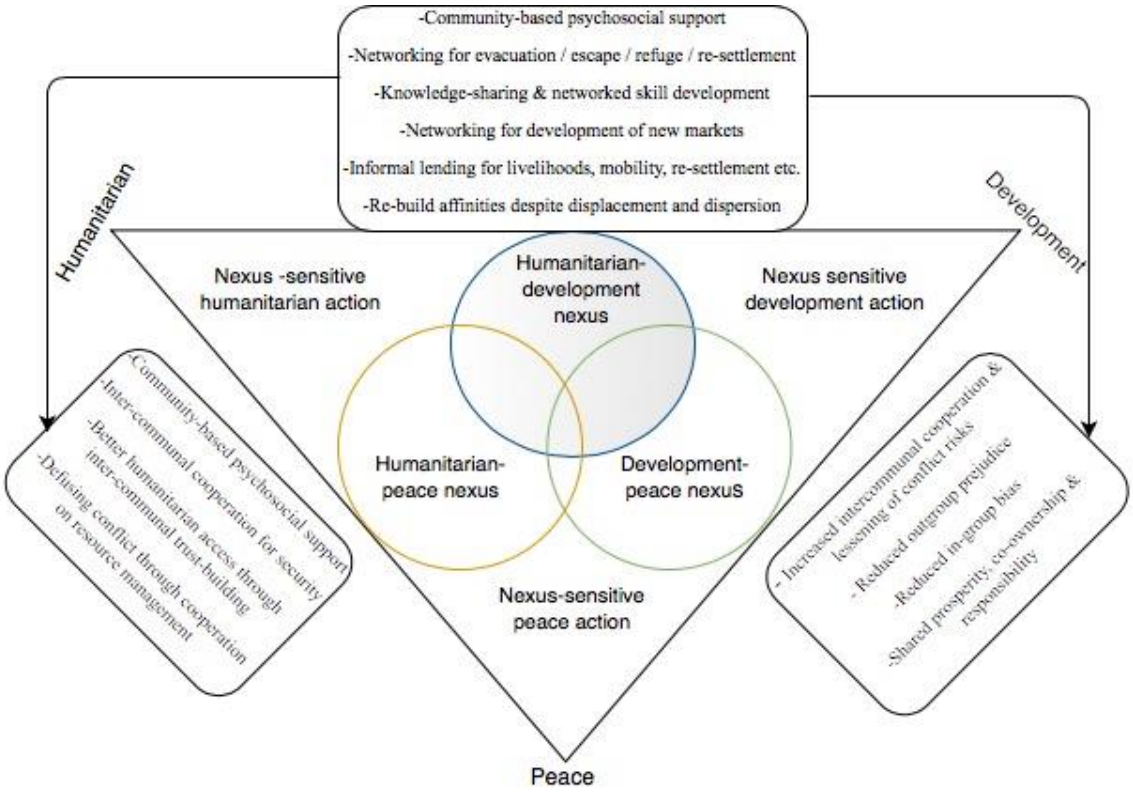

Figure 1. A model of social-capital-centred triple nexus in situations of forced displacement (adapted from Howe, 2019)

3. The empirical context

Northeast Nigeria is one of the six geopolitical zones in the West African nation, and comprises six states: Adamawa, Bauchi (Borno), Gombe, Taraba, and Yobe. It is the poorest geopolitical zone in the country, and the region with the highest levels of illiteracy and unemployment. Borno State, the epicentre of the Boko Haram insurgency, has an estimated population of 5.2 million and a landmass of 61,435 km^2, the largest state by landmass in Nigeria (University of Maiduguri, 2009). Maiduguri is the capital of Borno State and the largest city in Northeast Nigeria, covering an area of 543 km^2, and with an estimated population of one million (Mayomi and Mohammed, 2014).

In 2002, Boko Haram was formed in Maiduguri by the radical cleric Mohammed Yusuf. The name *Boko Haram* stems from its core teaching that Western education is forbidden (Adesoji, 2010). Although the group was founded essentially as a protest movement, by 2009 it had evolved into a violent insurgency. This is against the background of historical and socio-economic conditions prevalent in the Northeast in general and Borno State in particular.

The latest available data from the Nigerian National Bureau of Statistics indicated that the poverty headcounts in Northeast Nigeria are significantly higher than the national average of 40.1%: in the Northeastern states of Adamawa and Yobe the prevalence of poverty is 75.1% and 72.3% of the populace respectively[i] (National Bureau of Statistics, 2020). Endemic poverty and widespread unemployment, along with shortcomings of governance and perception of corruption among the political elite, became powerful recruitment tools in the hands of Boko Haram. The group's propaganda was spearheaded by a charismatic leader whose oratory and

social support programmes appeared to resonate more with unemployed and disillusioned youth.

After the insurgency broke out in July 2009, the Nigerian government's response was more violence. This response included violent crackdowns and harassment and arrest of youths in communities suspected to harbour Boko Haram. While the military strategy yielded modest short-term results, the crisis became intractable. A humanitarian crisis ensued as the tragedy precipitated mass displacement into IDP camps in Borno, Adamawa, Yobe, and Gombe states and as far as Abuja.

4. Methodology

4.1 Sampling and data collection

The paper adopted a mixed-methods approach with data collected through in-depth interviewing (see Gray, 2013) and surveys . This approach enabled both deeper and wider exploration as well as measurable and non-measurable outcomes, thus achieving credibility, validity and trustworthiness . Twenty-one respondents were interviewed across four IDP camps, in Borno and Yobe—two key States affected by the insurgency. This follows recommendations of Hennink et al. (2017) that between 16 and 24 interviews are sufficient to achieve meaningful knowledge in qualitative inquiry. The respondents include male and female representatives of displaced households, NGO workers and government officials. The interviews were carried out in Hausa, the *lingua franca* in the region, and translated locally with the assistance of a local university scholar. The list of questions used to guide conversations with participants is presented in appendix 1.

Quantitative data was obtained through a cross-sectional survey of 810 respondents across 12 locations spread around three states in Northeast Nigeria: Borno, Yobe and Adamawa states (see table 1, below). These are the states with the highest numbers of IDPs. The respondents were randomly selected from the official list of IDPs resident in the camps, whose population sizes range from 8,000 to 34,232 IDPs. We also set out to achieve 50-50 gender distribution as much as possible, although we found that, due to cultural factors, women were relatively less willing to participate in the interviews. To mitigate this, the research team co-opted four women and four men as part of the field research assistants. The demographic particulars of participants and their location is illustrated in table 1 below.

4.2 Profile of interviewees

Table 3 Profile of interviewees

ID	Category	Location (State)	Gender	Age	Level of education
1	IDP	Gwoza (Borno)	Female	32	Primary
2	Government official	Gwoza (Borno)	Male	51	Post-secondary college
3	NGO	Gwoza (Borno)	Female	31	Degree
4	Host community	Gwoza (Borno)	Male	48	Primary
5	IDP	Gwoza (Borno)	Male	28	Secondary

6	NGO	Gwoza (Borno)	Male	33	Post-secondary college
7	IDP	Kasaisa (Yobe)	Male	52	No formal education
8	IDP	Kasaisa (Yobe)	Male	32	No formal education
9	IDP	Kasaisa (Yobe)	Male	41	Primary
10	IDP	Kasaisa (Yobe)	Male	51	No formal education
11	IDP	Kasaisa (Yobe)	Male	23	No formal education
12	IDP	Kasaisa (Yobe)	Female	26	Primary
13	Government official	Bakassi (Borno)	Male	25	Degree
14	NGO	Bakassi (Borno)	Male	32	Degree
15	IDP	Bakassi (Borno)	Female	36	Secondary
16	Religious leader	Wulari Jerusalem (Borno)	Male	22	National Diploma
17	NGO	Wulari Jerusalem (Borno)	Female	25-30	Degree
18	IDP	Wulari Jerusalem (Borno)	Female	50	Post-secondary college
19	NGO Worker	Wulari Jerusalem (Borno)	Male	62	Post-secondary college
20	Government official	Wulari Jerusalem (Borno)	Female	50	Secondary
21	IDP	Wulari Jerusalem (Borno)	Female	39	Secondary

In order to gather the best-quality data, and also achieve a high rate of completion, the data collection followed a structured-interview approach in which the research assistants read out the questions in Kanuri, Shua, Gwoza, Hausa and Fulfulde. That was done only after seeking informed consent by reading out the accompanying participant-information sheets and informing prospective participants that they were free to withdraw from the interview at any point. Following the interviews, the data were entered in SPSS and subsequently saved in *dta* files for further processing and analysis in STATA Vs 15.

4.3 Variables and measures

This study investigated the relationships among five key variables, three endogenous and two exogenous. The three endogenous variables are: livelihood outcomes, mental health outcomes, and resilience; the exogenous are human capital and social capital. We sub-divide the latter into bonding and bridging-linking social capital. Bridging and linking social capital are typically distinguished (as described in section 2.1 above), but we merge them in this analysis because the survey questions that generate this variable (via exploratory factor analysis) relate to the two aspects of social capital. The line between bridging and linking may be porous in the study context, where local officials are mostly drawn from the local populace and are thus embedded in social networks and relations; therefore relations of productive trust and

reciprocity between them and ordinary people can fit the definitions of both social capital forms.

Also as mentioned above (section 2.1), our conception of resilience for this study focuses on the psychological and attitudinal. Therefore, the survey items for resilience were adapted from the Connor-Davidson (2003) resilience scale. This is mainly psychological and shock-related in content, having originated in studies and practices of treating post-traumatic stress disorder. We performed exploratory factor analysis and a confirmatory factor analysis to ensure that the resilience construct is distinct from that for our mental health variable.

Table 2 below summarizes the variables and measures. The items across the variables were measured using a seven-point Likert scale. Further details are in the supplementary document.

Table 2 . Summary of variables and measures

Variables	*Sources*
Livelihood outcomes	Items adapted from Serrat (2008) and WWF Nepal (2008)
Mental health outcome	Six items adapted from SF-36 questionnaire (Maruish, 2011)
Resilience	Eight items adapted from the (Connor and Davidson, 2003)'s resilience scale
Human capital	Six items were adapted from Becker (2009)
Social capital	Four items adapted from World Bank's (1999) SoCAT, along with 12 additional items from Murayama et al. (2013) and Poortinga (2012).

4.3.1 Analyses

Qualitative analysis. Transcripts of the in-depth interviews were subjected to thematic analysis using NVivo11. Themes and codes were developed following a rigorous process linking the research question and themes with established debates and issues on IDP management and possible insufficiencies of aid and humanitarian action.

Structural equation modelling. For the quantitative part of the analysis, following an exploratory analysis of the Likert-scale items for each variable, we employed structural equation modelling to analyse the cross-sectional survey data. In the model specification, we evaluated the direct and indirect effects of human and social capital on livelihood outcomes by introducing two intermediate variables, mental health and resilience (figure 3). Further details are in the supplementary material.

5. Results and discussions

5.1 Emerging themes from in-depth interviews

A key observation from the interviews was the collective recognition and acknowledgement of the imperativeness of psycho-social support for the IDPs. Such support was deemed integral to their capacity for resilience. As one NGO worker (ID6) noted, "this [counselling and psychosocial support] will make them better and move on with life". We also observed that aid workers (governmental or others) were particularly instrumental in providing initial support to displaced individuals, as exemplified by the following comment:

> "When the IDPs started arriving here at the camps, we received them and assisted them with immediate needs and psycho-social support to help them come out of shock. Many of them came traumatized." (Government Official, ID20)

However, despite personally overcoming significant physical and material challenges, the traumatic experiences of many displaced individuals necessitated additional institutional support for holistic recovery:

> "After all they have gone through with abuse, and trauma, they are still a bit mentally disturbed as a result and are also stigmatized…, we refer them to organizations who give them support so they get income and have a means of livelihood". (NGO Worker, ID19)

The reference to abuse here provides context to the sense of stigma. The abuse of women by Boko Haram is still culturally regarded as shameful even though it happened in a conflict situation and should not be regarded as such. From both the displaced individuals and key stakeholders' perspectives, there was also a clear recognition that emotional and practical support to IDPs was playing an important role in their ability to put the past behind and start the rebuilding process. Some respondents expressed appreciation of the capacity for individuals to provide meaningful emotional support, which includes comforting words shared by their networks of friends. For instance:

> "The families we have outside our immediate community have assisted us in the little way they could when we first arrived here. Though they were not buoyant financially but their frequent visit and show of concern to us have really made us forget our past bitter experience we had including the loss of properties and assets due to Boko Haram insurgency." (IDP, ID11)

> "There are so many ways that I can help [support them] but for now I can only give them a healing word, because even me I'm just managing my life and I have no business doing." (Host member, ID4)

The interviews highlighted the critical role of bonding social capital accrued from close networks of family and friends. Respondent 11, for example, lauded the emotional support received from friends and families in the aftermath of the insurgency, stating that 'a lot of our family [sic] have trooped to visit us and sympathise with us over what happened to us. The kind of support we received from them has really put our past bitter experience behind us.'

In addition to the emotional support, we identified that financial support from friends and families, although meagre in many instances, was a strong catalyst in the IDPs' journey towards self-sustenance:

> "Some of my friends help me with material things and some help me with cash which helps me to keep moving on even today." (IDP, ID5)

> "They have been of great help to me because some of them call me, some give me words of encouragement, some help me with cash, some with materials things." (IDP, ID1)

Beyond reliance on family members, we observed the inherent value of bridging social capital in aiding the recovery process of displaced people. Many respondents drew from extended networks of relationships established over time with people from other communities in different parts of the country. In moments of desperate needs, the IDPs were able to draw on these networks to cope in the aftermath of the insurgency:

> "Some few friends and business partners have been very helpful when we were first displaced due to Boko-Haram insurgency and relocated to this place. Kind and cash assistance were brought to me, and

> that have greatly helped in addressing some of our immediate needs like clothing, kitchen utensils and food stuff." (IDP, ID8)
>
> "I have an associate I once worked with in Baga who relocated to Kwara state and I worked with her there for a while… She is the only person who I can say has helped me since the displacement." (IDP, ID18)
>
> "I am a retired civil servant and I have colleagues whom we served together with and also people whom I recruited into the service, they are the ones that have been helpful…" (IDP, ID16)

The combination of psycho-social support accorded IDPs by institutional actors and their abilities in leveraging sustained relationship networks proved crucial in the early stages of the displacement. This aligns with reported impacts of social capital on psycho-social support in development contexts, in terms of bridging socio-economic inequalities and reducing the vulnerabilities of marginalised groups. It not only provided the IDPs with basic sustenance and impetus to strive to overcome adversity, it brought to the fore their innate entrepreneurial inclinations. This was a typical observation, captured in the following narrative by an NGO worker:

> "I know [a woman] who was in need and had nothing doing. I encouraged her to start a skill/business rather than being idle to support her family but she told me she had nothing to start with… I took a small amount of money which I gave her to start something. She used this to buy a measure of flour, peppered spice and vegetable oil, with which she at home started making *danwake* [spiced, flour-based staple meal] at home to sell. She started with a small measure of flour, and later expanded to selling a whole bag worth of *danwake* daily. …There are IDPs that came with nothing and today they are better off than people in the host community they met because they sought a means of livelihood for themselves through skills rather than totally being dependent and awaiting food aid all the time." (NGO Worker, ID17)

Invariably, the qualitative findings demonstrate that the IDPs were resilient and with some support, many were willing and able to develop new or existent skills to enable them cope with their predicament. The fact that they were able to draw from existing relationship networks as well as newly developed social networks also proved instrumental in aiding their livelihood recovery.

5.2 Descriptive statistics

The profile of survey respondents is summarised in table 3a. 60% of the survey respondents are male, and the vast majority, 79%, are married. Furthermore, over half of the study participants hold no formal education, and over 85% had been displaced for at least four years (as of the survey in 2019).

Table 3a: Profile of survey respondents

Gender	*Freq.*	*Percent*
Male	488	60.25
Female	322	39.75
Total	810	100
Marital Status		
Single	102	12.59
Married	642	79.26
Divorced	17	2.1
Widow/Widower	49	6.05
Total	***810***	***100***
Level of education		
No formal education	414	51.11
Primary education	201	24.81

Secondary education	157	19.38
Degree	32	3.95
Postgraduate	6	0.74
Total	***810***	***100***
Year displaced		
2013	12	1.48
2014	338	41.73
2015	348	42.96
2016	38	4.69
2017	12	1.48
2018	23	2.84
2019	35	4.32
Missing data	4	0.49
Total	***810***	***100***
Business ownership		
Yes	376	46.42
No	434	53.58
Total	***810***	***100***

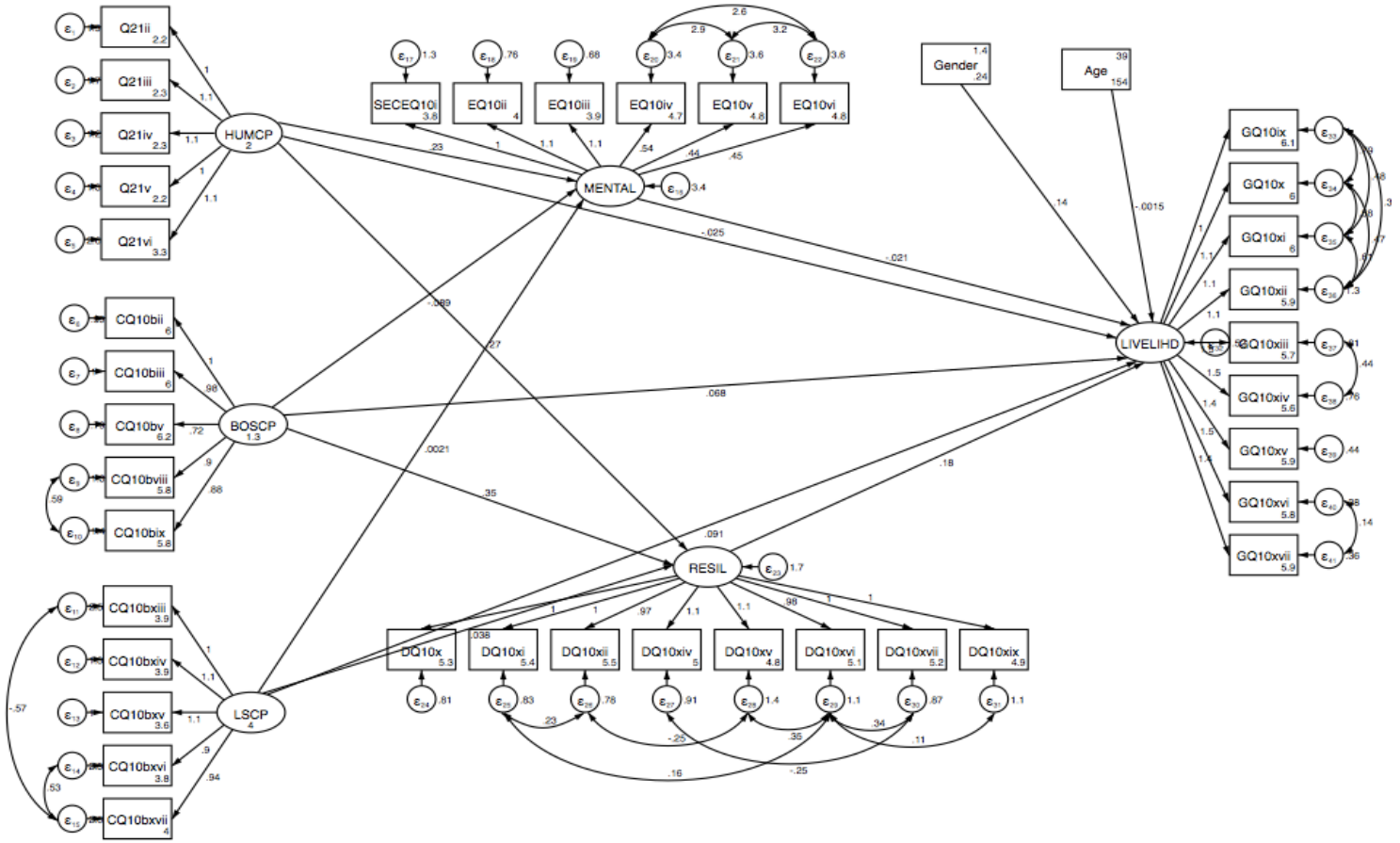

Figure 2. Specification of the structural model

Notes

HUMCP: Human Capital; BOSCP: Bonding Social Capital; LSCP: Bridging-Linking Social Capital; MENTAL: Mental Health Outcomes; RESIL: Resilience; LIVELIHD: Livelihood Outcomes

5.3 Structural equation modelling: results

The fit indices summarised in table 4 indicate that both the measurement and structural models satisfied the criteria for model fit, following recommendations from Weston and Gore (2006).

The evaluation of the direct and indirect effects summarised in table 5 indicate that human capital has a significant direct effect on mental health outcomes, with a standardised coefficient of 0.234 at 1% level of significance, but neither bonding nor bridging-linking social capital has a significant direct impact on mental health outcomes. Similarly, human capital exerts a strong significant impact on resilience, with a coefficient of 0.266 at 1% significance level. Bonding social capital has a strong significant impact on resilience (coefficient 0.346, 1% significance level), but bridging-linking social capital does not.

With regard to the main outcome variable – livelihood outcomes- resilience, bonding social and bridging-linking social capital all have direct significant effects on livelihood outcomes, respectively at 1%, 5% and 1% levels of significance. Furthermore, human capital has an insignificant direct effect on livelihood outcomes but a significant indirect effect. Given that human capital has a significant effect on resilience as shown above, the results indicate that the impact of human capital on livelihood outcomes is fully mediated by resilience. In other words, individuals with greater qualifications, knowledge and skills who achieve better livelihood outcomes are doing so thanks to their relatively higher level of resilience. In addition, the indirect effect of bonding social capital on livelihood outcomes, taken with the direct effect of bonding social capital on resilience, indicates that the impact of bonding social capital on livelihood outcomes is partially mediated by resilience. Finally, while the significant positive impact of bridging-linking social capital on livelihoods does not appear to be mediated by either mental health outcomes or resilience, it is worth noting that the direct effects of bridging-linking social capital on livelihood outcomes is larger (0.091 to 0.068) and more significant (1% vs 5% level of significance) than bonding social capital.

Table 4. Fit Indices, measurement model and corresponding structural model

Fit Indices	Measurement Model	Structural Model	Model Criteria
CMIN/DF	2.651	2.725	<3
CFI	0.921	0.909	>0.90
RMSEA	0.063	0.064	<0.08

Table 5. Social capital, resilience and livelihood outcomes

Regression paths	Direct Effects	Indirect Effects	Total Effects
MENTAL<HUMCP	0.2343195 (4.38)***	No path	0.2343195 (4.38)***
MENTAL<BOSCP	-0.089237(-1.27)	No path	-0.089145(-1.27)
MENTAL<BR/LSCP	0.0021729 (0.06)	No path	0.0021729 (0.06)
RESIL<HUMCP	0.2661363 (6.92)***	No path	0.2661363 (6.92)***

RESIL<BOSCP	0.3463906 (6.72)***	No path	0.3463906 (6.72)***
RESIL<BR/LSCP	0.0383343 (1.40)	No path	0.0383343 (1.40)
LIVELIHD<GENDER	0.1356468 (2.31)**	No path	0.1356468 (2.31)**
LIVELIHD<AGE	-0.0014662 (-0.64)	No path	-0.0014662 (-0.64)
LIVELIHD<MENTAL	-0.0205124(1.31)	No path	-0.0205124(-1.31)
LIVELIHD<RESIL	0.1817177 (7.55)***	No path	0.1845507 (7.73)***
LIVELIHD<HUMCP	-0.0251172 (-1.13)	0.0435558(4.39)***	0.0184386 (0.84)
LIVELIHD<BOSCP	0.0681501 (2.27)**	0.0647758 (5.15)***	0.1329259(4.35)***
LIVELIHD<BR/LSCP	0.0913571 (5.63)***	0.0069226 (1.36)	0.0982797(5.77)***

Note: P<0.1*, P<0.05**, P<0.01***

5.4 Discussion

The results' indication that human capital significantly affects mental health outcomes (hypothesis $H_{3)}$, but neither bonding (H_4) nor bridging-linking social capital (H_5) do, is a bit surprising, as previous studies (cited above in section 2.2) have found that social capital does indeed affect mental health positively. However, most of those studies' models did not incorporate human capital, as ours does. Given previous studies' findings that human capital has positive (Denny, 2003), sometimes absolute (OECD, 2010) impact on social capital, we suggest that, in our present study, the apparent effect of social capital on mental health may in fact be supplanted by that of human capital. In addition, since our conception of resilience is mainly psychological and attitudinal, and thus in a similar domain as mental health, the oft-observed relation between social capital and mental health may in this crisis context be expressing itself as (bonding) social capital influencing resilience. Our findings show that human capital and bonding social capital have significant positive impact on resilience (which in our structural model is a mediator); in fact, the standardised coefficient for bonding social capital's effect on resilience (0.346) is the largest by a wide margin among the three exogenous variables, making bonding social capital quite a strong determinant of resilience. The direct effect of human capital on mental health may be particular to a crisis context; if so, the mechanism may be the ability and knowledge that human capital affords to deal with challenges, thus averting depression or feelings of helplessness.

In terms of the determinants of the main endogenous variable—livelihood outcomes—the study finds that human capital's effect is fully mediated by resilience. This suggests that it is thanks to their relatively higher level of resilience that some individuals with greater qualifications, knowledge and skills are better able to achieve livelihood outcomes. This

probably illuminates the peculiarity of the study's conflict context, in which whole populations have been forcibly displaced and traumatised by a terrorist insurgency that killed thousands and destroyed billions of dollars' worth of assets. In more normal circumstances, individuals' skills and knowledge will play a direct and often decisive role in livelihood outcomes. In a major crisis situation like this, it seems that the imperative for survival takes precedence. Thus, affected individuals deploy all their skills and knowledge first to escape the threat and then to achieve a mental equilibrium and positive outlook required for them to move forward. Resilience is directly linked with vulnerability reduction and adaptive capacity (Lei et al., 2014), and these, according to the sustainable livelihood framework, are important precursors to livelihood outcomes (Serrat, 2008). In essence, affected persons need to reach the threshold of resilience before they can contemplate the future and effectively begin to rebuild their lives. This can also be explained in terms of resilience being instrumental to bringing some form of stability and structure in the aftermath of disruptive displacement in order that practical and vocational skills can play their role in the longer-term process of livelihood recovery. In other words, in a crisis setting, resilience brings the individual to a positive mental frame from where they can impose some kind of structure and stability in the external environment necessary to launch the livelihood recovery process. Conversely, individuals who may have high human capital but have not achieved psychological resilience are unlikely to prosper in crisis settings; and this stands to reason, if one imagines a highly trained or prosperous person thrust into a crisis context and unable to maintain equilibrium—such a person would be unlikely to successfully apply her livelihood skills to the new context. Corroboration for this putatively exclusive route of human capital to livelihood outcomes through resilience in crisis settings is not yet evident, though it may be a short step of the imagination from recent findings on, for example, Syrian refugees in Jordan (Stevens, 2016) and Turkey (Abedtalas et al., 2020).

The study's findings also indicate that bonding and bridging-linking social capital have significant positive effects on livelihood outcomes. The effect of bonding social capital is partially mediated by resilience (hypothesis H_1), while that of bridging-linking social capital is more direct on livelihood outcomes (H_2). These findings are consistent with previous propositions and empirical findings in the development literature; and, given the quest for new ways of addressing protracted crises, it is important to confirm that the same can prevail in crisis settings, and what the detailed mechanisms are by which it may do so. Some initial postulates could include informal credit, markets, information, pooling of skills and other tangible and intangible resources, co-operative work, and security, in addition to this study's finding on resilience's intermediation.

Within the humanitarian-development-peace nexus, our study's examination of human and social capital, mental health, resilience, and livelihoods outcomes among displaced people has variables and settings that situate it along the humanitarian-development axis. Extending to the peace vertex requires some extrapolation—though perhaps not much, as for example mental health could be expected to correlate strongly with absence of inter-communal conflict and tensions. It was useful to interrogate the mediating impact of resilience because of that term's prominence in nexus discourse, even though our conception thereof varies from those of many nexus practitioners and researchers. Our study indicates that individuals with higher stocks of bonding social capital are better placed to achieve livelihood outcomes due in part to their higher levels of resilience which is partly accrued from their close networks of family and friends. The qualitative data reinforces this: respondents reported that their family members and close friends were critical sources of positive reinforcements, giving them "good words." The absence of a direct effect of bridging-linking social capital on resilience can be explained by the closer proximity of family and friends' networks (which we would categorize as bonding social capital) as first responders in the wake of the crisis, and the first and default recourse for

encouragement and positive reinforcement. It may also reflect the fact that resilience in our study is operationalised at the individual, rather than the communal, level as the unit of analysis, whereas bridging and linking social capital usually operate at least in part on the collective level and thus would not automatically co-vary with individual resilience. Bridging-linking social capital does directly benefit livelihood outcomes in our study, perhaps because, when the displaced persons forge new relationships with host communities, IDPs from other places, government officials and aid agencies, these relationships are usually directly related with some practical benefits or economic outcomes. For example, entrepreneurial IDPs need to build new relationships in order to develop new markets for their products and services, and these entrepreneurial opportunities typically afford better livelihood outcomes.

The foregoing discussion underlines an important contribution of our present study to theory. Much of the current discussions on the triple nexus focuses on the role of external agents, arguing that in order to achieve objectives, actors from the three sectors need to pull resources and ideas together in programme design and implementation. We extend this discussion by focusing attention on the critical, and potentially decisive, agency of affected people themselves. This agency is developed and actualised at the individual and communal levels, first in terms of knowledge and skills inherent in and acquired by individuals (human capital), and then human capital's aggregation and deployment in networks of solidarity and collective action (social capital) for positive change. This does not negate the important contributions of external actors, but shifts the focus to affected people as primary agents for enduring and recovering from the effects of conflict, with external actors cast in supporting roles.

6. Conclusion and recommendations

This study examines the role of social capital on livelihood-recovery outcomes of households displaced by the Boko Haram insurgency in Northeast Nigeria. The study seeks to explore new pathways for humanitarian action, especially in protracted crises where short-term strategies increasingly seem inadequate and humanitarian actors need to look beyond material and financial support for affected people. Such pathways might also connect to developmental and peace-building action—the other parts of the triple nexus. The study finds that social capital, in terms of bonding networks of relationships and friendships within communities, and new bridging and linking connections across communities, provides an auspicious channel to address some of the critical non-material needs of affected people. These include psycho-social support for households, and the crucial role it plays in helping individuals and households pass the psychological threshold where they can begin to plan for a better future. Community solidarity appears to give affected people a renewed sense of meaning and optimism in the wake of traumatising displacement and the violence that precipitated it.

Further, social capital—along with human capital—was found to positively associate with resilience and livelihood outcomes. In other words, the achievement of livelihood outcomes is closely associated with the agency of affected people, fostered and actualised in large part through their networks of relationships. Livelihood outcomes are also enhanced by acquisition of knowledge and development of relevant skills at the individual level, though individuals must achieve some resilience in the sense of emotional equilibrium if they are to use their skills to good effect in livelihoods. We argue that social capital, reinforced by human capital, can provide households with the capacity to make the most of the opportunities available to them by charting a new course of sustenance and prosperity, and forging new relationships outside their immediate communal boundaries in the bid to co-facilitate development and build the peace. More data is needed to illuminate the processes by which development and peace-building can be effective in contexts of protracted crisis and forced displacement. Thus, we recommend that future studies explore the links between social capital and new market

development, and the mechanisms through which bridging and linking social capital can mitigate inter-communal tension, lower outgroup prejudice and repurpose latent human capital towards the co-creation of shared prosperity.

We outline below recommendations for research, policy and practice:

1. For operations-oriented research, create a social capital measurement tool adapted to displacement, ideally including recall information on pre-crisis types, degrees and mechanisms of social capital (to learn how displacement affects pre-existing social capital and how people adapt to its loss and re-create it). Incorporate social capital measurements in initial and recurring large-scale assessments (initially as a sort of diagnostic, then a tracking tool), with additional variables that may explain differences in degree and type of social capital among displaced people, such as degree of dispersal of community in displacement, or available means of communication.
2. Regarding practice, review efforts to foster social capital by means or as part of aid interventions, and conceive experiments to find optimal methods in crisis settings, for example managing displacement and resettlement sites so as to maximise people's opportunities to rebuild or replace social capital. Formation of bridging social capital in particular can catalyse the potential of such sites as new frontiers of economic opportunities in which displaced peoples and host communities can co-create new markets and entrepreneurial ecosystems.
3. Where a humanitarian-development-peacebuilding nexus is in progress, assess and program for social factors coherently across the three domains; and where a potential nexus approach is not yet concerted, form a nucleus of social-capital analysis and programming that can cohere the nexus.

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[i] In the latest data collection exercise, the National Bureau of Statistics could not obtain reliable data for Borno State, the epicentre of the insurgency, due to security and logistical challenges.