LIVES WORKING PAPER 2020 / 84

NETWORKED LIVES

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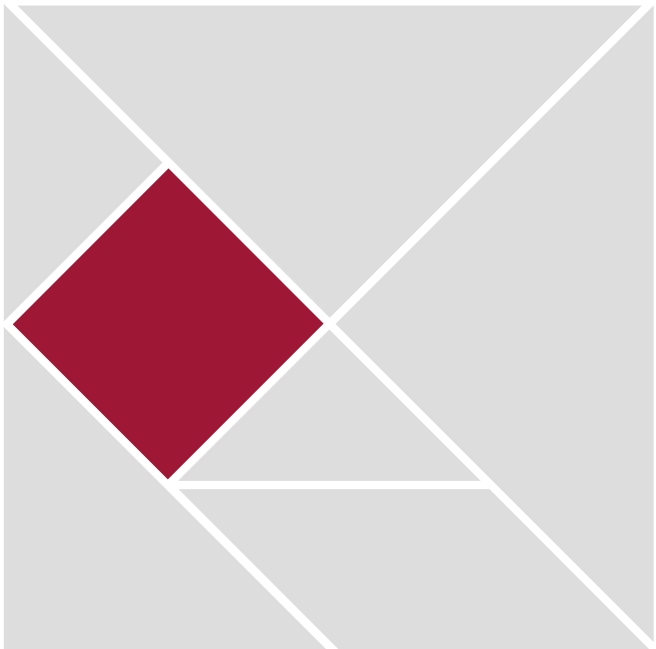
RESEARCH PAPER

http://dx.doi.org/10.12682/lives.2296-1658.2020.84

ISSN 2296-1658

https://onlinelibrary.wiley.com/doi/full/10.1111/jtsb.12265



The National Centres of Competence in Research (NCCR) are a research instrument of the Swiss National Science Foundation

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Abstract

Social network analysis has grown tremendously across a wide array of disciplines and is now regarded as a roadmap in strengthening links with the life-course perspective. 'Linked lives' are often cited as a key principle of life-course theory, but there is still much to learn about the way these links matter for one's life course. Network theory refines our understanding of the properties of these links, their emergence as structures in daily life, and the mechanisms underlying the inequalities that arise from social relationships. This paper clarifies why networks can be conceptualised as meso-level structures that bridge the micro-macro gap. It thus addresses four processes of particular interest for the integration of life-course and network research:(a) the problem of tie formation; (b) the activation of ties as social capital; (c) their resilience through segments of a lifecourse; and finally, (d) the problem of their loss. In so doing, we highlight innovative approaches for each of these issues to propose a research agenda, that we have labelled 'Networked Lives', which underlines promising avenues for advancing the integration of these two important fields in the social sciences.

Keywords

Life-course | social networks | meso-level | agency | structure | social capital

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Acknowledgements

Our gratitude goes to Betina Hollstein and Rick Jr. Settersten for making possible the conceptualization of this paper. We also thank René Levy and Eric Widmer, whose comments and suggestions improved this paper substantially.

*** This publication benefited from the support of the Swiss National Centre of Competence in Research LIVES – Overcoming vulnerability: Life course perspectives, which is financed by the Swiss National Science Foundation (grant number: 51NF40-160590). The authors are grateful to the Swiss National Science Foundation for its financial assistance.*

1. Introduction

Social relationships matter in many different ways during the course of life (Settersten, 2018). The principle of 'linked lives' highlights that our lives influence and are influenced by those of others: it is with others that we build our professional and life paths; we are also linked to others by beliefs, lifestyles, and identities (Elder, 1998). After all, it could not be otherwise: the presence of others is pervasive. Our everyday lives are constantly interwoven with those of other people, some of whom are important to us, but also with acquaintances and, most of all, strangers (Small, 2009). We share feelings and empathy with people we love. Thoughts, ideas, and gossip are exchanged between friends and colleagues—with whom we also collaborate in many different tasks during our work and lifetimes. The principle of 'linked lives' recognizes the roles of others during the lifecourse, especially those who play a significant role for us throughout the various stages of our lives. This is emphasized by Antonucci and Akiyama (1995) in their notion of *social convoy*. Important relationships accompany us in the different phases of our lives and they co-evolve with us. Their functions change in childhood and in the many phases that characterise the transition into adulthood, continuing to do so until later life (Kahn & Antonucci, 1980).

Life-course analysts often use the principle of 'linked lives' to reference important and significant relationships, such as dyadic and local ties (Carr, 2018), because these contacts are the most resilient, lasting through turning points and transitions. These are contacts whom most care about our health and well-being and who provide us with social support, as often noted in studies of family networks (Widmer, 2006; Rostila, 2011). Yet, although some contacts accompany us through different stages of life, other weaker connections play a very fleeting role in our lives; even more impermanent are those ties that are lost without a trace during the different segments of a life-course. Are these contacts also important? Certainly, some may prove irrelevant. However, what we do know is that many of these may have the opportunity to play a role at some point in our lives, because they represent potential social capital capable of influencing different domains positively or negatively (Lin, 2001).

Human lives are connected through vast and complex networks. It suffices to mention that only six intermediaries are needed to reach any person on the planet according to Milgram's (1967) celebrated 'small world' experiment; recent studies have suggested that this number could be even lower in a digital context (i.e., through Facebook) (Backstrom & al., 2012). Christakis and Fowler (2009) show that the influence of relationships is not limited to our closest circles and does not even end with people we know. For example, this paper will discuss the studies of Lazega et al. (2013, 2016) on the advantages derived from contacts situated 'three steps' away from a focal actor, in a

complicated web of connections between people and organizations. Marin and Hampton's study (2019) also seem to suggest that most contacts do not accompany us closely during segments of the lifecourse, often becoming 'dormant' and sharing resources over time only when necessary and useful. In sum, it seems imperative to refine our view of human lives as embedded in broader, more complicated connections. This is why scholars are increasingly promoting the idea that network theory and methods can provide the principle of 'linked lives' with a better grasp of this complexity, moving beyond 'the universal observation that lives are lived interdependently' (Alwin et al., 2018, p. 21).

The first section of this paper addresses the above topic by answering a fundamental question: what does 'network' mean? We explain that networks are not simply links, but rather more complex structures that can be conceptualised as junctions between the micro and macro levels (Wellman & Berkowitz, 1988). The reason therefore is that many aspects of the interplay between agency and structure depend on the contacts with which we establish a large number of interdependencies throughout life. We first bridge network and life-course theory to explore the emergence of these interdependencies during our daily interactions. In so doing, we clarify how network analysts streamline the properties of these meso-level structures—form and content— and how they reinforce social inequalities through the processes of homophily and embeddedness (Granovetter, 1985; McPherson et al., 2001).

In the second section, we develop empirical arguments that address more specific processes of interest from a longitudinal perspective. Many questions must be answered if network and lifecourse researchers are to make their perspectives converge. It is now a truism that individuals link their lives with others during their lifetimes, but where do people form these ties? Why are some contacts supportive (or not) during certain transitions? What makes contacts last in the long term despite transitions? And what are the conditions and phases that lead to relationships being permanently lost? We explore innovative directions on each of these issues facing aspects related to the (a) formation, (b) activation, (c) resilience, and (d) loss of social relationships across segments of the life course. As a result of this discussion, we outline a research agenda labelled 'Networked Lives', which outlines promising theoretical and methodological avenues to strengthen a heuristic alliance between social network analysis (hereinafter 'SNA') and life- course research.

2. What Do We Talk About When We Talk About Networks?

Life-course and network theory have much in common. According to Alwin et al. (2018), since the

mid-1990s both bodies of research developed as general perspectives rather than pure theories per se. The term 'life-course' was little used in the 1980s and early 1990s, and it was only at the end of that decade that studies from this perspective began increasing exponentially (Giele and Elder, 1998; Shanahan et al., 2016). Similarly, the field of SNA lacked a general framework before the mid-1990s. It was the 1994 essay 'Social Network Analysis: Methods and Applications' by Wasserman and Faust that clarified its foundations, principles, objectives, and techniques. Since then, the network perspective has grown across a wide array of disciplines. Although some works have sought out the intersections between these two perspectives in the past (Bidart et al., 2011; Carstensen et al., 1999), only recently have life-course and network researchers started to strengthen their collaborations (e.g., Cornwell & Schafer, 2016; Hollstein, 2018).

What these two perspectives have in common is firstly their mutual attention to the social actor in its individual dimension. This is particularly evident in the life-course perspective— where the focal actor is the real protagonist (Bernardi et al., 2019)—but also in network approaches, to a certain extent. In fact, during the early developments in SNA, anthropologists of the Manchester School opposed network analysis to the quantitative studies in vogue during the 1950s, because the idea behind the development of a network approach 'was to bring back agents into the unit of analysis' (Bellotti, 2010, p. 2). This suggests that what unites the two perspectives is a shared interest in individuals and their conditioning, and in people's ability to act with a degree of reflexivity, i.e., agency (Emirbayer & Mische, 1998; Hitlin & Elder, 2007). This obviously makes their interconnections important, as is evident from the notions of 'network' and 'linked lives'. In addition, the two perspectives place actors in larger contexts of opportunities and constraints to understand their (dis)advantages, embodied by the notion of 'embeddedness' and the principle of *times and places* (Evans, 2007). Although of course with a different focus, both also have in common an interest in the longitudinal nature of social phenomena—that is, the *timing* and *development* of human lives across different segments of the life course and the conditions and mechanisms underlying the evolution of networks, which SNA addresses using many different approaches (Lubbers et al., 2010; Ryan & D'Angelo, 2017; Snijders, 2005).

However, although network and life-course theories address common issues, their principles and concepts seem to frequently intersect without specifically communicating with each other. This section therefore revises the cornerstones of the notion of the 'network' to underscore its junction with life-course perspectives. We explain that when we talk about networks, we are not addressing simple connections, but rather structures that emerge from our daily interactions as contexts of opportunities

and constraints, in which individuals are nested in a pure multilevel sense (van Duijn et al., 1999). Conceptualised as a 'space between' the macro and the micro— that is, the meso-level—a 'network' addresses the structural influences on people's lives as underlined by the principle of 'linked lives', but adds to the latter a complexity that to a large extent encompasses all the principles of the life-course (Settersten & Gannon, 2005).

2.1. The Emergence of Networks as Meso-level Structures

Literally, *meso* means 'in between'. The focus on intermediate levels of analysis responds to the common urgency among researchers to obtain a parsimonious abstraction of the functioning of social life. Scholars who take the notion of the meso-level into account can be found in a rather diverse body of literature, including Brofenbrenner (1986), Turner (2012) and Jaspal et al. (2015). Of course, what 'in between' means reflects differences across disciplines and approaches, so researchers may refer to a fair number of meso-levels that seem epistemically irreconcilable. Nevertheless, what social scientists who use this notion have most in common is their emphasis on the importance of considering contexts that are more proximate than macro-social ones, thus addressing individuals' opportunities and constraints more concretely. In this respect, Lazega and Snijders (2015) claim that network analysis has provided the most consistent attempt to address this issue. This is because scholars—by conceptualising the emergence of interactions as different types of networks (e.g., personal, sociocentric, or multilevel)—can streamline the opportunities and constraints arising from social relationships as a juncture within the micro-macro gap.

Helpful in understanding the network perspective is addressing the link between the meso- level and the microscopic dimensions of everyday life—what phenomenologists call the *Lebenswelt*, or 'life-world' (Schüz & Luckmann, 1973). As already mentioned, it is a truism that during our daily routines, our lives are constantly interwoven with those of acquaintances, strangers, and people we know. What is initially crucial is to disentangle the fact that during these routines we interact with these persons according to different structures that bridge the micro and macro in many respects (see Archer, 1995; Giddens, 1990). For instance, certain norms and 'typifications' are important in making our interactions with strangers natural and unproblematic. We follow these rules by standing in line before entering a bus, paying for our purchases at supermarket checkouts while interacting with the employees, or respecting the highway code (Berger & Luckmann, 1966). Of course, these norms are also important in our interactions with people with whom we spend the most time in our everyday lives. The difference is that we also exchange with these latter individuals entirely different types of

resources, such as information, knowledge, or social support (Lin, 2001). When routine interactions occur amongst a more stable set of agents—i.e., those with whom we frequently share these resources—they become links that can be conceptualized as structures of behavior in a network sense (Wasserman & Faust, 1994). Ever since our birth, we have been part of these networks. They may be solid, partly-inherited connections such as family networks, but they can be also weaker networks of professionals, acquaintances, neighbours—or even links that are significantly harder to trace, such as criminal networks (see Diviák, 2019 on *covert networks*). These interdependencies guide a substantial proportion of people's daily interactions, which in turn reveal the former as patterns of behaviour in the ongoing interplay between agency and structure. As our life experiences change over time, these networks evolve, connecting us to new people, sometimes bringing us closer to others, and often moving us away from them. Social bonds 'are established, they can flourish and (...) they can also dissolve quietly', thus bringing with them a whole series of sub-networks that are more difficult to trace, including networks of conflicts, obligations, feelings of reciprocity, shared identities, and mutual interests (Snijders et al.,2010, p. 44).

The links between human lives are vast, omnipresent, and diversified, and are ordered by those specific structures which scholars recognise in the notion of the network (Wasserman & Faust, 1994). When interactions emerge from routines as networks, they therefore differ from spontaneous encounters, because they objectify interdependencies among more or less stable sets of participants (Bourdieu, 1986). This is the reason why scholars consider networks 'fundamentally a multilevel affair' (Lomi et al., 2016, p. 266). Human lives are nested within enduring interdependencies that provide opportunities and constraints for individuals at both factual and cognitive levels (Lozares, 1996). When these phenomena emerge from the microscopic dimension of our routines, they become 'middle-range' structures with different types of properties. It is through these properties that network analysts address what is 'in- between' human agency and social structures (Settersten & Gannon, 2005).

2.2. Form and Content: The Properties of Networks

When we find a set of actors and their social ties, we can study the effects of these interdependencies as social facts (Wellman & Berkovitz 1988). Many ideas behind this network approach, as Hollstein (2020) argues, were inspired by Simmel's writings and his notion of *social forms*. Simmel's legacy, evident in studies ranging from the sociometry of Moreno to the analysis of Burt (1992), was also underscored in Emirbayer's (1997) relational manifesto. These studies pinpointed the core aim of

social network analysis: the study of social relations and their influence on individuals.

However, networks of many different types pursue this broad aim on different scales—from *whole* (or *complete*) *networks* of organizations, firms, and institutions, to family, friendships, or professional networks. Vacca (2018, p. 60) explains that SNA has historically privileged the study of social relationships by means of *egocentric approaches*, where networks are constituted 'by a focal person ("ego") and its direct contacts ("alters")'. These types of networks are used the most in life-course research (Alwin et al., 2018) and help streamline the links between human lives through three main properties: their *size*, namely the number of ties that constitute them; their *composition*, which reflects the features of the agents that participate in these networks; and their specific *structure*, which captures how these actors are interconnected (McCarthy et al., 2019).

When scholars consider the size and structure of networks, they are interested in studying the networks' appearance or 'form' (Lozares, 1996). Analysts usually examine these forms to address many different questions, such as: Why do contacts know each other? What kinds of sub- groups tend to form? What explains the links between people? In doing so, analysts can, for example, identify regions of these networks that are more or less interconnected—a property called density. 'Density' represents one of many possible ways to examine the distribution of power within networks, as well as to evaluate the influence of these configurations on the 'ego'— that is, the individual linked to all those persons (Perry et al., 2018). On the other hand, the social characteristics of these agents constitute the specific *content* or *composition* of these networks: Who are all these contacts? Are they kin, friends, or neighbours? What kinds of education do they have? What are their professions? Do they help the ego in certain aspects of her or his life? These are some of the common issues addressed in different bodies of research in order to probe the influence of social relationships over multiple domains of individuals' life.

2.3. Homophily and Embeddedness: Advantages and Disadvantages at the Juncture of the Micro- and Macro-levels

What do these properties tell us about how people's networks create advantages or disadvantages? Scholars stress that collecting contacts' characteristics (the *content*) and their interconnections (the *form*), opens up many avenues to examine the effects of networks for a focal agent (Perry et al., 2018). Existing studies focus on centrality measures, cliques, mechanisms of brokerage, and exponential random graph models (ERGM) (Alwin et al., 2018), as well as actors' motivations and intentions, which are increasingly being examined using network theory and qualitative approaches

(Crossley, 2010; Hollstein, 2011, 2018; Lubbers et al., 2010; Ryan & D'Angelo, 2017). The effects of networks on individual forms of behaviour have been noted across a wide range of topics, such as job outcomes, innovations, health issues, or academic success. They have been examined mainly through mechanisms of *social influence*, such as contagion, or *social capital* (Lin, 2001). We will now focus on the latter.

The literature on social capital is vast, and an extended summary of its main concepts is provided by Rostila (2011). What we know is that one of the most important functions of social relationships is their potential to offer a diversity of resources, such as information, knowledge, and practical or emotional support, to aid individuals in achieving certain goals and needs; that is, they provide resources that individuals lack. Contacts supply these resources in many different ways, but do so largely unequally (Bourdieu, 1986, Coleman, 1988; Portes, 1998). This is because networks are structures that evolve through mechanisms such as transitivity and *homophily,* which tends to make individuals relate to ties that are homogeneous in resources: ties with people of a similar class background, education, and/or identity, who occupy similar positions in a given society (McPherson et al., 2001). This idea was first argued in an essay by Homans (1958), 'Human Behavior as Exchange'. However, it is the 'like-me hypothesis' of Lazarsfeld and Merton (1954) that seems to most capture the original sense of the principle of homophily. During routines, Lazarsfeld and Merton argue, individuals interact most of the time according to the *like-me* principle, which leads them to share resources with individuals in the same socio-economic conditions. In this respect, if we translate these phenomena into disadvantaged groups, paraphrasing Nan Lin (2000, p. 789), these groups acquire poor social capital through their links. In sum, during their daily routines, vulnerable persons exchange resources—such as information about job opportunities—more frequently with actors who are experiencing the same vulnerabilities, which exacerbates social inequalities (Bonoli & Turschi, 2015; Portes, 1998).

These mechanisms bridge the micro-macro gap in two different ways. On the one hand, the *form* and *content* of networks can be seen as configurations of opportunities and constraints that reproduce the inequalities emerging from the macro-level. They do so by means of different forms of embeddedness that reflect larger systems of economic, cultural, and social stratification (Molina et al., 2020). We use the notion of embeddedness in a similar sense to Mark Granovetter (1973, 1985)—i.e., that social relationships have valuable resources that are intrinsically attached to their statuses and positions. In this respect, networks reproduce the features of the macro-level, especially when individuals create links through homophily processes, which intrinsically lead them to form similar

ties in larger contexts of inequalities across *historical time and place* (Evans, 2007). On the other hand, networks can also be seen in terms of the opportunities they offer and the barriers they create to human agency—that is, the ability to plan for the future with a certain degree of reflexivity and awareness of long-term implications (Hitlin & Elder 2007, p. 182). Relationships appear crucial to understanding these specific actions: What kinds of support can contacts with unequal resources provide during these processes? Why do they decide to share these resources? And how else do they hinder individuals' life goals? We raise these questions to make it clear that a 'bright' (support, care, love, empowerment) and 'dark' (conflicts, barriers, violence) side appear as part of the *content* of networks (Everett & Borgatti, 2014; Antonucci & Akiyama, 1995).

3. Networked Lives: Ties Formation, Activation, Resilience, and Loss

Network and life-course researchers have outlined innovative approaches and ideas about the ways in which these meso-level processes influence the individual's life-course. Leading researchers in these fields promote a major emphasis on the organisations and institutions in which routines take place in everyday life in order to explain how connections are created, the reasons for their persistence, and therefore, the advantages that derive from social relationships (Offer & Fischer, 2017; Lazega & Jourda 2016; Small, 2009, 2017). Other as Smith (2005, 2017) underscore the need to examine why the people we are connected with provide support, thus exploring motivations and intentions. Such an approach should enable network researchers to switch from an 'egocentric to an altercentric' view—that is, placing the emphasis on *alter's* rather than *ego's* perspective (Smith & Young, 2017, p. 234). This may in turn help integrate a more varied view of the actors involved during processes of *human agency*, especially in vulnerable groups (Lubbers et al., 2020; Small, 2017). An emphasis on the *phases* of interactions among actors in turn seems to lead Settersten (2015, 2018) to focus on 'rites of separation', namely the conditions that explain how—and with what motivations and consequences—lives become *unlinked*. In addition, the interest in the impact of the digital world is also growing (Lee & Lee, 2010; Hampton, 2019). Nowadays we interact through different *media*, such as computers and smartphones, that foster interactions beyond the limits of *time* and *space*. This seems to contribute to the persistence of contacts in networks over time and how ties that have become 'dormant may be reactivated' (Marin & Hampton, 2019, p. 3). However, it is still unclear whether these online communications are also a good means to transmit care and social support, which still seem to be associated with geographical proximity and *face-to-face* interactions (Stefanone, 2012).

3.1. The Formation of Ties: A Multilevel Lens on Structural Opportunities

How are ties created over time? In the 2009 volume *Unanticipated Gains: Origins of Network Inequality in Everyday Life*, Small (2009, p. 10) argues that this question has long been ignored by network analysts (see also Marin & Hampton, 2019). The reason is that studies of networks have been far more interested in examining social relations as forms of investment than the ways in which links between individuals are created. In essence, social relationships have been examined as social capital where people invest to obtain socio-economic returns; this is the core of Lin's (2001) theory of 'access-mobilization-return', in which individuals access social capital through their relationships and mobilise them through purposeful actions, consequently obtaining socio-economic returns.

However, Small (2009) argues that studying how routines occur in the groups and organisations to which individuals belong is fundamental to addressing how people make connections, and more generally helps us understand how social inequalities work. People do not always form connections through purposeful actions, Small (2017) warns. Indeed, as Offer and Fischer (2017, p. 114) stress, supportive ties can be created unexpectedly, in places such as childcare centers (Small, 2009), university lecture halls (Kossinets & Watts 2009), or even beauty salons (Furman, 1997). Scholars are therefore promoting the study of the *contexts* within which routines take place in order to understand the structures of opportunities for forming new bonds. This emphasis on the *context* of interactions is not incompatible with the idea that individuals target connections in a purposeful way, but 'it assumes that access, physical or social proximity, is key to the process of tie formation and maintenance' (Offer & Fischer, 2017, p. 115).

Lazega and colleagues' studies (2008, 2013, 2016) of multilevel networks provide important insights into further exploring the formation of connections in the context of the organisations in which people work. Their 2016 paper 'The structural wings of Matthew effects: the contribution of three level network data to analysis of cumulative advantage' (Lazega & Jourda, 2016) demonstrates that researchers affiliated to cancer research laboratories in France improved their performance over ten years thanks to organisational ties (Lazega & Jourda, 2016). This is because organisations are 'good brokers', helping people make connections and facilitating collaborations with specific indirect contacts, so-called 'dual alters' (i.e., researchers in a collaborative network of organisations). *Dual alters* provide additional resources in terms of funding, recruitment, manuscript reading, and/or projects that could not be achieved from scratch, but only through a specific tetradic path—that is, through connections involving four actors.

These results open up different avenues for the study of professional advantages over the life

course (Dannefer, 2018; Ferraro & Shippee, 2009). What the authors clarify is that people cannot benefit from dual alters 'on their own, without the help of their hierarchy' (Lazega et al., 2013, p. 11): they need the collaboration of their bosses and managers to create these beneficial connections. This means that some of the ego's advantages can only be explained by looking at contacts that are situated three steps apart: the first step connects the ego with a 'boss' in his or her personal network, the second step connects this 'boss' with another hierarchical superior in another organisation, and the final step connects this last contact with a 'dual-alter', forming what is called a 'multilevel three-path in tetradic sub-structures'. A similar formulation suggests that two intermediaries are needed to access an area of organisations where newer, richer, more diversified, and useful resources circulate (Granovetter, 1973). This extends what egocentric network analysts know about different types of social capital—for example, about the regions of networks that provide care and support, and the ways weaker and dissimilar connections can bridge novel opportunities (Rostila, 2011). Lazega and colleague's findings enhance the study of where 'extended opportunities structure' flow, which the former has formalised in the 'paraglider metaphor' (Lazega & Jourda, 2016). The cumulative advantages derived from 'dual alters' remain unexplored in life-course research, as they place the emphasis on organisational practices and routines, as well as on the roles played by managers in creating these connections.

3.2. The Activation of Ties: The Altercentric Perspective of Poverty and Marginalisation

How are contacts activated as social capital? As already mentioned, network analysts have long sought answers to this question by considering contacts as forms of investment (Lin, 2001). Studies of labour markets provide extensive research about the structural aspects of the activation of contacts. Based on the celebrated 'strength of weak ties' thesis (Granovetter, 1973), scholars have stressed the importance of activating non-redundant connections to access new and more valuable information (Chen & Volker 2016). This is because intimate and local ties, including family ties, are more likely to offer support and assistance—that is, bonding social capital—and less likely to provide rich and valuable information (Lin, 2000, p. 789). As already mentioned, this is due to the fact that strong ties are usually homogeneous in resources (Lin, 2000), and therefore weaker and more dissimilar connections help actors access more diverse flows of information.

However, as with the problem of the formation of ties, scholars have advocated shifting the attention to other processes, thus going beyond the structural position to examine the activation of social capital. Why and how do contacts decide to help actors in their goals and needs? The

altercentric perspective of Smith (2005, 2017) seems to be of particular interest in analysing the *logic* of interactions among actors, as well as alters' motivations and intentions in providing support in the labour market. This emphasis is important in order to provide a more pluralised view of the actors involved in *human agency* processes, increasing knowledge about network functioning as opportunities and constraints (see also Newman, 1999; Marin, 2012; Small, 2009). Generally, feelings of reciprocity and obligations provide a first answer to the question of how support is transmitted, especially where family ties are among the major elements of social cohesion (Bian, 1997; Sharone, 2014). However, Smith (2005) shows that vulnerable groups, e.g., young black people on low incomes, are not motivated to help close friends not because they have no information, but because they are afraid of compromising their reputation with their bosses (see also Marin, 2012). Research shows that, beyond their position in networks, it is the contacts' decisions regarding 'who to help, when to help, how best to help or whether to help at all' (Smith & Young, 2017, p.172) that make the difference. This is a crucial aspect in understanding the 'dark' and 'bright' sides of social capital (Everett & Borgatti, 2014; see also Lin & Ao, 2008 on the 'invisible hand of social capital').

Social vulnerabilities are an increasingly important aspect of study from a life-course perspective (Spini et al., 2017). The *altercentric* perspective may apply in many domains and stages of the life-course, but it is particularly interesting in relation to the recent study of poverty trajectories by Lubbers et al. (2020), 'Do networks help people to manage poverty?' The authors argue that local and denser regions of social networks, such as friends and family ties, are often described as safety nets, which can help people move forward in life and deal with difficult times and stressful situations. However, Lubbers et al. show that, in the context of marginalisation, family ties in fact tend to erode and become an additional source of vulnerability, rather than a safety net. That said, Small (2017), in his celebrated essay 'Someone to talk to', emphasises that people facing difficult times may search for supportive contacts outside the family bond because these latter ties are fraught with expectations. Nonetheless, it seems that little attention has been paid to contacts' motivations and intentions during these processes. Structural and institutional explanations have both received significant attention in poverty studies, but less is known about the role played by networks in poverty trajectories. This limited attention, Lubbers et al. argue, 'is surprising, since poverty is profoundly relational in the sense that it is lived, managed, negotiated, and reproduced in relationships with others' (Lubbers et al., 2020, p. 8). Networks are created through mechanisms such as transitivity and homophily that exacerbate social inequalities. Vulnerable groups seem to have difficulties not only in accessing social capital, but also in activating social ties. Exploring this issue in greater depth might account

for a substantial proportion of how people experience and seek to escape poverty.

3.3. The Resilience of Ties: Understanding Dormant Ties

The impermanence of relationships is a core aspect linking network and life-course research. Certain important relationships accompany us in different phases of our lives, co-evolving with us, adapting over time in some respects, and remaining stable in others (Antonucci et al., 2019). However, although some contacts accompany us through different stages, many other weaker connections remain active for only a certain period. This is because a substantial number of our contacts seem to suffer the turbulences of transitions and 'turning points' (Marin & Hampton, 2019). Research shows that these phenomena are exacerbated during major life events, such as educational and work transitions (Bidart & Lavenu, 2005), migration (Lubbers et al., 2010) or changes of residence (Coleman, 1988). During important events, we lose sight of many contacts, thus creating novel connections, collaborations, and/or conflicts (Cornwell & Lauman, 2018). Given the precariousness of many life trajectories around the globe, why and how contacts persist in our networks—that is, their resilience—appears to be a key issue for network and life-course research (Fischer & Offer, 2019).

Researchers have promoted additional efforts to create a theory of *tie dormancy*. Marin and Hampton (2019) suggest that, once an interdependence between two persons is created, in most cases it fades, ultimately becoming 'dormant'. In their 2019 study 'Network instability in times of stability', they reveal that tie dormancy occurs in times of relative stability as well— demonstrating that many contacts who have provided support at some point tend to become less supportive over time (Marin and Hampton, 2019). Although these ties are not completely dissolved, dormant ties are problematic in that they lose their ability to transmit resources, which seems to be a distinctive feature of 'active' connections.

Crucial to understanding resilience processes is exploring how these ties are reactivated. Studies of information and communication technologies (ICTs) suggest that *online interactions* play an important role in this process (Marin and Hampton, 2019). Indeed, with the Internet expanding how sociability is experienced in the 'realworld', people's ability to foster interactions beyond the limits of time and space has been improved (Lee & Lee, 2010; Wellman et al., 2001). One critical feature here of apparently entails there activation of ties that have become dormant because of geographical distance. However, what still seems unclear is the functioning of these processes: are online communications useful in reactivating any type of connection? Can online tools help in mobilising

any kind of resources, such as information or social support? Research suggests that *face-to-face* interactions are still crucial in enhancing care and social support, as well as in cultivating a sense of *relatedness* that is important for mental health (Hu, 2009, Stefanone et al., 2012). Marin and Hampton (2019) advocate for greater consideration to be given to the digital world as a means of facilitating tie resilience. However, a better understanding is needed in terms of what kinds of personal networks benefit from online communications, and for which resources *face-to-face* interactions—or alternatively geographical and physical proximity—are needed. This issue has been of great importance since Putnam's famous 2000 paper, 'Bowling Alone'.

3.4. The Loss of Ties: From Linked to 'Unlinked Lives'

While some network analysts such as Marin and Hampton have been motivated to understand how contacts become dormant, other scholars seem more concerned with how relationships are lost. Although these two aspects are immanently related, it is perhaps Settersten's (2015, 2018) emphasis on 'separation rites' that offers an initial distinction between dormant ties and contacts that are permanently lost (see also Fischer & Offer, 2019).

In essence, how do the processes that divide us from contacts take place? This seems to be the key question that Settersten poses, while stressing the need to deepen our knowledge of the *phases* through which interactions take place—that is, the processes that anticipate the loss of ties, for example, in divorces and separations. This new emphasis could have several implications. For one, by examining these processes, our understanding of the influence of social relations extends beyond their interactional nature as links that persist in people's identities. 'Just as there are rites of passage that mark entry into social roles', says Settersten (2018, p. 23), so are there rituals that separate us from others, and thus from the social roles we performed through and with them. Divorce is perhaps the most emblematic example of all these 'rituals of separation' that aim to unlink lives. However, according to Settersten, if relationships can be legally broken off, they generally do not disappear socially, and above all, they do not disappear in their psychic nature. The label 'ex-', says Settersten (2018, p. 23), 'will continue to live in the identity of the people to whom they were once attached, even long after the relationship has ended'.

Networks are factual because they depend on social interactions, but they are also immanently cognitive entities, because they persist in individuals' psychic dimensions, helping them preserve their identities (Lozares, 1996). Network analysts have made fewer efforts to understand the anticipatory phases of these processes, although these appear important for both cognitive and social

capital functioning. Indeed, an additional implication of the emphasis on 'rites of separation' is its impact on network structures. When we suddenly lose important connections, networks change their *form* in very significant ways, as does access to resources of social capital. Many contacts in our lives are important for keeping entire communities active in our networks. Cornwell and Lauman (2018) emphasise that, when we are ready to lose a tie or *unlink* from someone voluntarily, for example, we are also ready to connect with other people in search of new relational balances. It is these preparatory *unlinking* processes that Settersten (2015, 2018) encourages us to study more deeply, both in terms of their psychic and their social natures.

4. Conclusion and Discussion: What Next for SNA and Life-Course Research?

Social network and life-course analysts aim to work together (Alwin et al., 2018). This paper has examined basic concepts of network theory to bring to light the intrinsic properties of social relationships, thus assessing core aspects of their longitudinal nature. We noted that, when networks emerge as bridges between agency and structure, they do so through processes that are anchored in everyday life—that is, what phenomenologists call the 'lifeworld' (Schütz & Luckmann, 1973). By means of this meso-level lens, network analysts appear to have conceptualised well how networks exacerbate inequalities through mechanisms of homophily and embeddedness (Granovetter, 1985; McPherson et al., 2001). These basic SNA concepts seem useful in integrating the principle of 'linked lives' theoretically, and in advancing views of human lives as embedded in larger and more complex networks that can be examined for their size, structure, and composition—that is, their *form* and *content*—with the SNA toolbox (McCarty et al., 2019).

The paper has sought to achieve this goal by first exploring these fundamental aspects, thus providing a framework for enhancing further collaboration between researchers operating within these two fields of study (Table 1). We have built these avenues of collaboration by highlighting four fundamental processes that may bring life-course and network analysts together in studies of: (a) the problem of tie formation; (b) the activation of ties as social capital; (c) their resilience through segments of the life-course; and also, ultimately, (d) their loss. With this aim in view, we addressed each of the listed issues by means of innovative perspectives emphasising the context, logic, media, and phases of interactions to understand more deeply the complex nature of connections in human lives.

We have made it clear that scholars are interested in the *context* in which interactions take place as a means of understanding the problem of social capital creation (Small, 2009; Marin & Hampton,

2019). Emmanuel Lazega's multilevel network approach offers innovative insights into how to address this issue, providing a possible way of exploring these processes within professional trajectories. Certain beneficial connections, which Lazega and Jourda (2016) call 'dual alters', can only be created with the help of two intermediaries: bosses and/or managers in a complex organisational network. Greater integration between analyses of multilevel networks (AMN) and multilevel network analysis (MNA) is necessary in order to make these results useful in life-course research's study of cumulative advantages (Dannefer, 2018; Ferraro & Shippee, 2009). Qualitative methods should also be encouraged to advance the understanding of tetradic paths in longitudinal terms, by observing organisational practices and routines as well as examining the role played by hierarchies in helping (or not) to create these connections.

In many ways, this perspective is linked to what Smith (2017) calls an *altercentric* lens—that is, an emphasis on the *logic* of interactions that stresses the importance of why contacts decide to help. This perspective provides a more pluralised view of the actors involved in *agency* processes and is particularly interesting for the study of vulnerabilities, a central aspect of the life-course perspective (Spini et al., 2017). Why don't people always help in difficult times? We know that vulnerable groups experience serious difficulties in accessing social capital due to the implicit processes of network creation, such as transitivity and homophily (Lin, 2000). However, a large part of altercentric research warns that the problem of vulnerable people is not only access to social capital but also its activation. This is because many contacts do not seem inclined to help people in need and often fear for the consequences for their reputations (see Smith, 2005, Marin, 2012; Smith & Young, 2017). Lubbers et al. (2020) are currently working to study these processes among the trajectories of poverty. Structural and institutional explanations have both received huge attention in poverty studies, but less is known about the role played by networks as meso-level factors explaining the way people live and cope with poverty.

In addition, it seems crucial to pay major attention to the digital world in order to understand processes of resilience. Different *media* such as computers and smartphones foster interactions beyond the limits of *time* and *space*. This seems to be important to explain why contacts persist in our networks over time and how we reactivate ties that become 'dormant' (Marin & Hampton, 2019, p. 3). However, it is still unclear whether online communications are a good method of transmitting specific resources, such as care and social support, which seems to be associated more with geographical proximity and face-to-face interactions. Network and life-course researchers should work together to advance theory on *tie dormancy* and to examine further the resilience of contacts

through different interactional phenomena, especially online vs. face-to-face interactions.

Finally, attention to the *phases* through which links are created, maintained, and therefore dissolved might also promote a better understanding of tie losses. In this respect, Settersten (2018) interestingly places the emphasis on the processes through which people *unlink themselves* from important relationships. Examining the processes anticipating major transitions, such as divorces and separations, is a key aspect for understanding how networks live beyond their interactional nature in people's identities and concepts of self. This is why the attention paid to 'separation rites' might lead us to a better understanding of networks in their cognitive nature, and might also have implications for social capital research by examining how people cope with losses by creating new connections (Cornwell & Lauman, 2018).

Indeed, scholars have searched and found connections between these fields of study previously (Bidart et al., 2011; Carstensen et al., 1999), and many others are currently looking for new collaborations and ways to unite these perspectives. Many of these works merit attention, and it may be necessary to do more than just mention them in order to integrate SNA and life- course research more strongly. Examples include the work of Koehly (2017) on health issues; the emphasis of Hollstein (2018) on the study of biographies; the notion of *reserve* (Cullati et al., 2018) in understanding resource activation over time; and, of course, the evolution of *social convoy* (Antonucci et al., 2019). Many methodological aspects deserve primary attention and should be treated as main issues, as a corollary of this paper. Although the integration of egocentric networks within longitudinal designs is not new (Burt, 1984; Cornwell et al., 2009), there is much demand for working on less expensive methods using, for example, visual and qualitative tools (Ryan & D'Angelo, 2017), and for improving the integration of network data within retrospective design (see Bolíbar et al., 2019 on *hybrid tools*).

Despite these limitations, the present paper contributes to the integration of these two fields of study by suggesting a way of bridging network and life-course theory through the study of tie creation, activation, resilience, and loss. Hopefully, this will yield a fruitful framework for forming novel collaborations between these two important fields of research and will lead to innovative results.

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6. Appendix

Table 1: Networked Lives: opportunities of collaboration for SNA and LC research.

NETWORKED LIVES			
Focus		*Innovative directions for SNA and LC research*	*Keywords*
TIES FORMATION How do we create ties?	Emphasis on the *context* of interactions.	Studies of the cumulative advantages provided by *'dual alters'* in organisational fields.	Cumulative advantages Dual alters Structural opportunities Multilevel lenses
TIES ACTIVATION How do we activate ties?	Emphasis on the *logic* of interactions.	*Altercentic* perspective on processes of social capital mobilisation in poverty trajectories.	Agency Marginalisation Social support Alters
TIES RESILIENCE How do ties last over time?	Emphasis on the *mediums* of interactions.	Studies of *online vs. face-to-face interactions* as means to facilitate ties resilience and support.	Time and space Online communication Face-to-face interactions Tie dormancy
TIES LOSS How do we lose ties?	Emphasis on the *phases* of interactions.	Further attention on the anticipatory processes that *unlink lives*, e.g., separation and divorce.	Linked lives Separation Identity and Self Losses