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Family social capital and health – a systematic review and redirection

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Abstract The level (or scale) at which social capital can be conceptualised and measured ranges potentially from the macro-level (regional or country level), to the meso-level (neighbourhoods, workplaces, schools), down to the individual level. However, one glaring gap in the conceptualisation of social capital within the empirical literature has been the level of the family. Our aim in this review is to examine the family as the 'missing level' in studies on social capital and health. To do so, we conducted a systematic review on the use and measurement of this notion in the health literature, with the final intention of articulating a direction for future research in the field. Our findings are consistent with the notion that family social capital is multidimensional and that its components have distinct effects on health outcomes. Further investigation is needed to understand the mechanisms through which family social capital is related to health, as well as determining the most valid ways to measure family social capital.

Keywords: social capital, family/kinship, public health

Introduction

Several definitions of social capital have been advanced, most of them including concepts of trust, shared norms, reciprocity and resources accessed by individuals as a result of their membership in social networks. As a concept, social capital includes both, the resources accessible through direct, individual connections – more related to social support, information channels and social credentials; as well as the ones that are available to all the members of a given network thanks to the relationships within the network itself –such as norms, trust and reciprocity (Kawachi and Berkman 2014).

Two main approaches exist with regard to its measurement, which are generally referred to as the social cohesion[1] and the network-based views[2] (Islam *et al*. 2006, Villalonga-Olives and Kawachi 2015). When social capital is approached through the social cohesion perspective, it focuses on the extent of closeness and solidarity within groups, and as such, the most used measures tap into indicators such as sense of belonging, trust, and norms of reciprocity.

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Carrasco and Bilial (2016) have argued that researchers often subsume the concept of social cohesion into social capital, and that that the conflation of social capital with social cohesion results in an individualising tendency that is antithetical to cohesion. We argue however, that social capital and social cohesion are not the same concepts. Nor is social cohesion being subsumed into social capital. To the contrary, social cohesion is a broader concept than social capital, and is defined by two overarching features of society, namely, the absence of latent conflict – whether in the form of economic inequality, or tension/conflict between groups defined by race, ethnicity, religion, immigrant status; as well as the presence of strong social bonds and solidarity – of which social capital is one aspect (Kawachi and Berkman 2000). Thus, one can have social capital without social cohesion (as Carrasco and Bilal 2016 argue), but one cannot have social cohesion without social capital.

In contrast to the cohesion school, the network-based approach to social capital is focused on measuring the resources that are accessed by individuals through their social network. This approach focuses on examining the network positions of individuals, and the resources embedded in those network ties, which are classified according to different types, including instrumental support, emotional support, appraisal support, and informational support (House 1981). Although an ongoing debate exists between these two schools and whether both can co-exist under the social capital umbrella, the prevailing tendency is to consider the two of them as complementary streams of social capital research (Kawachi and Berkman 2014).

The level (or scale) at which social capital can be conceptualised and measured potentially ranges from the macro-level (regional or country level), to the meso-level (neighbourhoods, as well as organisations such as workplaces and schools), down to the individual level. Social capital has been linked to a variety of health outcomes, including all-cause mortality (Kawachi *et al*. 1997 – social capital measured at state level), self-rated health (Kawachi *et al*. 1999 – social capital measured at state level; Rose 2000 – social capital measured at individual level), mental health (Harpham *et al*. 2004 – social capital measured at community level; Rose 2000 – social capital measured at individual level), cardiovascular disease risk (Sundquist *et al*. 2006 – social capital measured at community level), cancer (Lynch *et al*. 2001 – social capital measured at country level) and obesity (Holtgrave and Crosby 2006 – social capital measured at state level), among others.

In health research, most of the empirical research on social capital has focused on the neighbourhood as the unit of interest, that is, the potential health benefits (as well as downsides) accruing to the residents of communities as a result of their being connected to their neighbours. However, one glaring gap in the empirical literature on social capital and health has been the level of the family, which is remarkable since individuals are primarily nested in families, and family social capital has been posited by many authors as a cornerstone of social capital (Bourdieu 1986, Coleman 1988, Fukuyama 1999, Newton 2001, Putnam 1995). Family social capital is referred to here as the social capital that can be drawn from the family environment.

This lack of research on family social capital does not entail that the family context has not been investigated in the health field: the relevance of family has been actually widely acknowledged and there are notorious contributions on the effect of family functioning and family cohesion on health, especially from behavioural and developmental sciences, but these have not been much explored through the lenses of social capital.

One might ask whether referring to 'family social capital' is pouring old wine into new bottles. What the social capital discourse can add to the study of the family as a determinant of health has to do with achieving a more comprehensive understanding of the influence of intra-familial processes and structure – such as relationship dynamics, the resources embedded within them, and the connections with the environment outside the family. Because this is still

an under-explored field, this article has the potential to draw attention to research on the family field and to offer new areas on where to act to improve individuals and community's health.

Concept of family social capital

Coleman was one of the earliest scholars to bring social capital discourse into the family environment. To him, the main function of family social capital is to make the parent's human capital available to children, and it depends 'both on the physical presence of adults in the family and on the attention given by the adults to the child' (Coleman 1988: S111). Bourdieu (1986) also draws from a similar concept, when he describes social capital as another form of capital (along with material capital and cultural capital), that enables families to successfully manage the material and symbolic resources that they possess for the benefit of its members (Furstenberg and Kaplan 2004). For both of Coleman and Bourdieu, family social capital is seen as the means through which parental human capital can be accessed by the child, and in the case of Coleman two dimensions are distinguished, one referring to the structure and another to the function: high family social capital entails not only the physical presence of adults in the household (e.g. two parent households, i.e., the structural dimension), but also the presence of supportive interactions between parents and their children (which does not always exist even if the parents are physically present, namely, the functional dimension).[3]

In his work 'Social capital in the creation of human capital' (1988), Coleman explores how family social capital is relevant to the educational achievement of children. Despite the description of the different forms of social capital made in the first part of this paper, however, a distinction between them is not made in the empirical work. Family social capital is, then, estimated through the use of four indicators: (i) the ratio of parents to children; (ii) the frequency of talking to parents about personal experiences; (iii) the frequency of discussions with parents about personal matters and (iv) the mother's expectations about the child's education. His results showed that the ratio of parents to children and maternal educational expectations were associated with a decreased risk of dropping out of school, while the frequency of talking to parents about personal experiences was not related.

Several critiques have been made to Coleman's operationalisation and measurement of family social capital, which can be summarised in three main aspects. The first aspect refers to the omission of the multifaceted nature of social connections, which may be relevant to health outcomes. In the last fifteen years, the Australian Institute of Family Studies has made a considerable effort to provide further foundation to family and community social capital, resulting in two comprehensive publications in which Winter (2000) and Stone (2001) discuss, respectively, the concept and measurement of these two kinds of social capital. In both texts, a point is made that Coleman's measures are biased, since they only gather information related to the structural component of social capital, failing to take into account the quality of those relationships, and consequently not capturing elements of 'trust' and 'norms' within family relationships. The inclusion of an item reading 'the frequency of discussions with the parents about personal matters' could be interpreted as an attempt to measure the quality of family relationships but Winter's argument, which we agree on, is that using this item as the only indicator to assess quality fails to reflect the true nature of such interactions and eludes the dimensions of these social connections that may be most relevant to the studied outcome.

The second point is related to the attribution to children of a passive role in the construction of social capital. In examining the existing accounts of the creation of family social capital, Morrow (1999) has argued that the concept is scarcely developed as it relates to the role of

children and that a youth's perspective on family social capital is missing in the scientific literature; that is, they are most often viewed as mere receptors of social capital without contributing to its creation. This is most clear in Coleman's work when he emphasises the negative effects of an increasing number of children in the family, while he recognises the relevance of other adult family members in the household on the available social capital. In this sense, we join Morrow (1999:751) in advocating for 'a more 'active' conceptualisation of children drawing on the sociology of childhood' that would allow an exploration of 'how children themselves actively generate, draw on, or negotiate their own social capital or indeed make links for their parents or even provide active support for parents'.

Third, the non-consideration of socio-demographic features as potential co-variables. Authors such as White (2008) or Morgan (2011) have shown how the significance of social capital is influenced by personal characteristics such as gender, age or ethnicity, as well as by parental (or other family members') beliefs and behaviours, as they are likely to set the norms and values of the group.

Notwithstanding these debates and critiques, Coleman's original work has undeniable merit in drawing attention to the concept of social capital in the family context, although this area of study has been rather overlooked in health sciences. Our aim in this review is to examine the family as the 'missing level' in studies on social capital and health by conducting a systematic review on the use and measurement of this notion in the health literature, with the final intention of articulating a direction for future research on the field.

Methods

A systematic search in PubMed, Web of Science and Sociological Abstracts databases was conducted in September 2015, using different search strategies built with the assistance of a medical librarian. The Boolean operators were built specifically for each of the databases and included different terms for the concept of 'family', plus the term 'social capital'. No time limits were applied. Inclusion criteria with regard to the conceptualisation of family were not set, as one of the interests of this review was to explore how had the notion of family been approached. The decision of limiting the sample to studies mentioning explicitly 'social capital' was made with the intention of specifically investigating the use of the social capital theory to study the influence of family dynamics on health. Additionally, only quantitative studies were included so that it was possible to extricate in a comparable way the items used to measure it. The conceptualisation and operationalisation of family in this context is a critical issue, as we shall see later. Because of the exploratory character of this review, at least in its first part, a decision was made to include all the papers indicating that family social capital was measured, independently of how 'family' had been operationalised. In this way, we sought to have a broad overview upon which to build our subsequent redirection.

The search provided 718 references, which resulted in 317 documents after removing duplicates. Four inclusion criteria were used to distinguish the relevant literature: (i) papers based on quantitative empirical research; (ii) measuring social capital within the family; (iii) having a documented health outcome – which include both mental and physical health, health behaviours and health care access and (iv) with full text accessible.

The 317 references yielded after the duplicate removal were first title and abstract screened by one coder, who judged whether each paper met the inclusion criteria. For each of the references, a 'yes', 'no' or 'can't tell'. The movement of references with one or more 'can't tell' to the full text screening phase was discussed with the other authors of this paper. The process was repeated in the full-text stage, with the 47 references that conformed to the inclusion criteria.

A total of 30 papers conformed the final sample and were tabulated to facilitate the analyses. Table 1 shows the full list of references together with their descriptive data.

Results

Family social capital in the health literature

From the review of the papers in our sample, it can be learnt that family social capital in the health literature has been mostly operationalised by adapting the concept of social capital to fit the boundaries of family. The depth of the analyses varies, from some authors using simple indicators such as the frequency of parents playing games with their children (Berntsson *et al*. 2007), to others even attempting to differentiate between the structural and cognitive dimensions of social capital or bonding, bridging and linking relationships within the family (Gonsalves 2007, Widmer *et al*. 2013). In short, we can say that the approach described begs two questions: (i) how is 'social capital' conceptualised? and (ii) what is the definition of 'family'?

Reflecting the broader 'state of the art' social capital research, in which multiple definitions of social capital are used, a variety of definitions of social capital have been also applied to the family context, drawing on those elaborated by Bourdieu (1986), Coleman (1990), Putnam (1993) or Lin (2001), among others. All of them have in common, in that try to capture the extent and nature of family-based network ties, but as well as within the broader literature on social capital and health, two distinct streams have emerged, namely, the social cohesion and the network conceptions of social capital (Kawachi and Berkman 2014, Kawachi *et al*. 2010).

Research on family social capital and health has relied on both the social cohesion and the network approaches. However, there are notable differences in the use of the two approaches in relation to the subjects' life stage and characteristics: for example, research on the elderly as well as people with disabilities have almost exclusively relied on the study of networks and social support, as opposed to investigations in children and youth, which have tended to adopt the social cohesion approach.

One reason why the network approach has not been developed as much as the social cohesion approach may be the way in which 'family' has been defined in these studies. As previously discussed – taking off from Coleman's work – a good part of the research on family social capital has focused on how certain parent-child relations make resources available to children. Seen in this way, the network structure is something that does not need to be defined, since it is already implicit: at the structural level, the family network is constituted only by the children and their parents, and, somehow, the quality of these ties has been estimated preferentially through general questions about cohesion or sense of belonging between members. We agree with Furstenberg and Kaplan (2004), that a further exploration of the characteristics of these ties and what they can provide to health is missing.

In our sample, the study by Widmer *et al*. (2013) provides one of the few examples in which a thorough assessment of the family network was actually conducted. In their research, they applied the family network method, a specific sort of name generator. As in other name generators, participants are asked to provide a list of persons – in this case, persons whom they consider significant 'family members'– for whom they also answer some questions about emotional support, conflict and influence in their own relationships as well as between the other family members previously identified.

The question of what constitutes a family is not a trivial one. Given the heterogeneity of family roles and structures even in western societies (European Communities 2003, United States Census Bureau 2011), a straightforward adoption of the household and/or conjugal family as a unique form of family is, to say the least, biased.

Table 1 *Characteristics and measures used in the 20 papers reviewed*

	Paper	Country	Sample	Health-related outcomes	SC conceptualisation	Family conceptualisation	Constructs	Items
1	Litwin and Stoeckel (2014)	16 European countries	28,697 persons aged older than 65.	Well-being	Collection of social contacts that give access to social, emotional and practical support	Couple, children, relatives.	Network extent	Name generator in response to the question 'Looking back over the last 12 months, who are the people with whom you most often discussed important things?'
							Network composition	Type of relationship: (i) spouse or partner; (ii) children; (iii) other family; (iv) friends and (v) others.
							Proximity	Proportion of members living within 5km of the respondent's residence.
							Frequency of contact	Daily, several times a week, about once a week, about every two weeks, about once a month, less than once a month
							Emotional closeness	Proportion of cited persons with whom the respondent felt very or extremely close.
2	Dufur *et al.* (2013)	United States	10,585 students	Adolescent alcohol and marijuana use	Following Coleman (1990), resources that inhere in the relationships among actors and that facilitate a range of social outcomes.	Parents and children	Interconnection	–How often students discuss (a) school programs, (b) school activities, (c) school classes. –How often parents check home-work.
							Trust	–How much do you trust your children?
							Parental interaction with school	–Parental attendance at parent-teacher meetings –Parental attendance at school events
3	Widmer *et al.* (2013)	Switzerland	48 individuals (24 young adults with mild intellectual disability and psychiatric disorders and 24 young adults with mild intellectual disability but without psychiatric disorders)	Psychological adjustment	Relational resources embedded in social networks that are mobilised in purposive actions.	List of persons considered as significant family members by the respondents at the time of the interview.	Family ties	Using the Family Network Method, participants are asked to provide a list of persons that they consider as significant family members at the time of the interview.
							Emotional support	'From time to time most people discuss important personal matters with other people. During routine or minor troubles, who would give emotional support to X?' *(all individuals included by the respondent in his or her list of family members were considered one by one)*
4	Eriksson *et al.* (2012)	Sweden	3,926 11-15 years old children	Subjective health complaints Subjective well-being	Social capital refers to people's participation in social networks and associations, and the norms of trust and reciprocity that arise from these interactions.	Parents and children		–How easy do you find it to talk to your father? –How easy do you find it to talk to your mother?
5	Han (2012)	Korea	3,449 adolescents	Health-risk behaviours	Following Coleman (1988), the embodiment of relations	*Parents and youth*	Parent-youth communication	–Parents and I candidly talk about everything –I frequently speak outside experiences and my thought to parents

(continued)

Table 1 *(continued)*

	Paper	Country	Sample	Health-related outcomes	SC conceptualisation	Family conceptualisation	Constructs	Items
					between parent and youth.		Parental knowledge of youth's activities	–When I go out, parents usually know who I am with. –When I go out, parents usually know what I am doing.
6	Li and Delva (2012)	United States	998 Asian Amerian Men	Smoking behaviour	Features of social life – networks, norms, and trust – that enable participants to act together more effectively to pursue shared objectives. Following Putnam it refers to social connections and the attendant norms and trust.	Referred in the text as a 'Family' and 'relatives', not further defined.	Family connections	–How often do you talk on the phone or get together with relatives? –How much can you rely on relatives for help with a serious problem? –How much can you open up to family and talk about your worries?
							Family cohesion	10 items evaluating sense of family: –Family members respect for one another –Value sharing among family members –Trust among family members –Loyalty to family –Pride of family – . . . 5 more
							Family conflict (as a lack of SC)	5 items concerning attitude towards one's family: –Personal goals that conflicted those of the family –Arguing over different customs –Feeling lonely and isolated because of lack family unit – . . . 2 more
7	Rothon *et al*. (2012)	England	13-14y-old adolescents from 13,539 households.	Psychological distress	Coleman's conceptualisation is used, with some modifications based on critiques which have emphasised the need for some agency to be attributed to young people rather than using parental social capital as a proxy.	Parents	Quality of parent-child relationship/ Adults interest in the adolescent	–How well get on with (step-) mother/father –How often fall out with (step-) mother/father –How often talk to (step-) mother/father about things that matter to young person –How true it is to say (step-) mother/father likes young person to make own decision –How many times have you eaten evening meal with family in last 7 days?
							Parental surveillance	–How often parents know (children) where going out in evening, –Whether parents ever set curfew on school nights.
8	Morgan *et al*. (2012)	England, Spain	3,591 15 y-old adolescents	Life satisfaction	The social capital framework used here was adapted from Morrow's original qualitative work exploring the concepts relevance to young people.	Parents	Family sense of belonging	–How often family do things together: watch TV or video; play indoor games; eat meals; go for a walk; going places together; visiting friends or relatives; play sports; sitting and talking
							Autonomy and Control	–How often mother/father let me do the things I like doing, like me to make my own decisions, try to control everything I do, treat me like a baby.

(continued)

Table 1 *(continued)*

	Paper	Country	Sample	Health-related outcomes	SC conceptualisation	Family conceptualisation	Constructs	Items
							Family social support	My mother/father (asked separately): –is loving; –understands my problems and worries; –makes me feel better when I am upset –helps me as much as I need
9	Lau and Li (2011)	China	1306 sixth-grade primary school children and their parents	Subjective well-being	Resources embedded in social relations and social structure.	Parents and children	Structural social capital	–Discussing important issues between parents and children –Interpersonal interactions with parents and children
							Cognitive social capital	–Children perceived parent-child relationship –Level of trust with family members
10	Li and Delva (2011)	United States	2071 Asian American adults	Smoking behaviour	Individuals' objective social network and their subjective evaluation of family and neighbourhood environment.	Referred in the text as a 'family' and 'relatives', no further defined.	Social ties with relatives	–Frequency of talk on phone with relatives –Reliance on relatives for serious problem –Open up to relatives to discuss worries
							Family cohesion	10 items: –family members respect one another –share values –work well as a family – . . .
							Family conflict	Five items –argue with family, –personal goals conflict with family – . . .
11	Litwin (2011)	United States	1350 old adults	Depressive symptoms	The array of social contacts that give access to social, emotional and practical support	Referred in the text as a 'family' and 'relatives', no further defined.	Subjective quality of relationships	–How often can you open up to member of your family if you have a problem? –How often can you rely on them if you have a problem? –How often of members of your family make too many demands on you? –How often do they criticise you?
							Structure of social network	–Marital status/cohabitation –Number of children –Number of close relatives
12	Moxley *et al.* (2011)	Philippines	361 adults	Nutrition and health knowledge	Putnam's conceptualisation of social capital, as features of social organisation such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit.	Parents and children	Reflections of symbolic bonding Family Solidarity	–Are children living away from home? –Are you separated? –Does your family eat dinner together? –Does your family go to religious services together? –Does your family have birthday parties for children? –Does your family have birthday parties for adults? –Does your family go to the movies together? –Does your family go on picnics together?
13	Pettit *et al.* (2011)	United States	Longitudinal study: 459 children from kindergarten to 24 years old	Life adjustment outcomes: behavioural adjustment, educational attainment, and arrests and illicit substance use.	Following Furstenberg and Hughes (1995): the complex and variegated social mechanisms that parents gamer to advance their	Parents	Global relationship quality	–From 1 to 10 rate your relationship with your mother/father relationship (asked separately
							Support from parents	–How much does your mother/father provide for your emotional needs?

(continued)

Table 1 *(continued)*

	Paper	Country	Sample	Health-related outcomes	SC conceptualisation	Family conceptualisation	Constructs	Items
			and their families.		children's chances of success.			–How much does your mother/father take care of your practical needs? –How much does your mother/father act as an advisor/mentor?
							Parental involvement	–How often does your mother/father talk with you about ordinary daily events in your live … and 6 more items
14	Bala-Brusilow (2010)	United States	102,353 children	Childhood obesity	Resources accrued and/or accessed from social relationships/ social bonds at multiple levels including the individual, family, neighbourhood, community or nation.	Household	Family structure	–Family structure in the household (two parent biological/adoptive family; two parent step family; single parent/other)
							Family size	Number of persons under the age of 18 living in the household
							Family eats together	Number of days during the last week that the family ate ate least one meal together
							Parent know child's friends	Proportion of child's friends that parent has met
15	Farrel (2010)	United States	3150 youth	Suicidal behaviour	Set of resources derived from social relationships that allow individuals to implement and accomplish otherwise elusive tasks.	Parents and youth	Parental warmth	About respondents mother and father: –I usually count on her/him to help me out if I have some kind of problems. –She/he usually keeps pushing me to do my best in whatever I do –We do fun things together –She/he usually helps me if there is something I don't understand –When she/he wants me to do something, she/he usually explains the reasons why –She/he spends time just talking with me.
16	Litwin and Shiovitz-Ezra (2010)	United States	1,462 old adults	Well-being, as measured on three separate constructs: loneliness, anxiety, and happiness.	The array of social contacts that give access to social, emotional, and practical support, according to Gray (2009)	Couple, children, relatives.	Network type	–Marital status –Number of children –Number of close relatives
17	Wu, Xie, Chou, Palmer, Gallaher, Johnson (2010)	China	5,164 11-19 years old adolescents.	Depressive symptoms	Following the seminal work of Coleman, social capital refers to the resources inherent in social relationships that facilitate a social outcome.	Parents and siblings	Quality of parent-child rrelationship	–On days when no adults is home after school, how many hours are you at home without an adult there? –How many days a week do you eat dinner with your parents?
							Parental monitoring	–Are you allowed to go out with friends that your parents don't know? –How often do your parents check whether you've done your homework?
18	Ferlander and Mäkinen (2009)	Russia	1190 adults	Self-rated health	Resources accessed through personal social contacts.	Referred in the text as a 'Family' and 'relatives', no further defined.	Informal family social capital	–Marital status: a) Married (or cohabiting) b) non-married (divorced, widowed or single) –Do you tend to visit relatives?

(continued)

Table 1 *(continued)*

	Paper	Country	Sample	Health-related outcomes	SC conceptualisation	Family conceptualisation	Constructs	Items
19	Keating and Dosman (2009)	Canada	2407 adults aged 65 years and older	– Care assistance	Relying on Putnam's conceptualisation: the resources or 'stock' developed over time through trust and norms of reciprocity which facilitate coordination and cooperation for mutual benefit.	Referred in the text as a 'Family' and 'relatives', no further defined.	Network structure	–gender composition (proportion of the care network comprised of women) –age composition (proportion of the care network between –45 and 64 and proportion of the care network over 65); –relationship composition (Lone spouse, children at home or spouse and children) –proximity (proportion of the care network residing with the senior recipient and proportion of the care network more than 1/2 day's travel away from the senior recipient); –employment (proportion of the care network employed full or part time); –Network size (number of members of the care network)
20	Morgan and Haglund (2009)	England	6425 young people aged 11, 13 and 15.	– Self-reported health and wellbeing- Health-promoting behaviours- Risk taking behaviours (two)	The social capital framework used here was adapted from Morrow's original qualitative work exploring the concepts relevance to young people.	Parents and children	Family sense of belonging	How often do you do the following activities together with your family? –Going for a walk –Sitting and talking about things –Visiting friends and relatives –Going places
							Parental control	Father/mother asked separately: –How often does your mother or father try to control everything you do?
21	Bassani (2008)	Japan	6,985 respondents	Self-rated health	Social relationships	Parents, children and grand-parents (3 generations)	–	–Number of children parent has –Living in multigenerational homes
22	Berntsson *et al*. (2007)	Nordic countries	10,291 children in 1984 and 10,317 children in 1996	Psychosomatic complaints	Networks, norms and social trust that facilitate co-operation for mutual benefit and in turn lead to a broader social cohesion	Parents and children	–	–How often do you, spouse/partner and the child play games together?
23	Glendinning and West (2007)	Russia	637 15-21y-old youth	Measures of mental health and self-rated general health: feelings of self-worth and depression.	Not described	Parents and children	Feelings of support	e.g. my parent/s understand my problems and concerns
							Control	e.g. my parent/s try to control everything I do
							Autonomy	e.g. My parent/s like me to make my own decisions
24	Gonsalves (2007)	United States	1983 adolescent	Alcohol use, depressive symptoms and global health ratings	Resources established through relationships	Referred in the text as a 'Family' and 'relatives', no further defined.	Bonding/ Structural	–Household roster –How fare in school did mother/father go? –What kind of work does mother/father do?
							Bonding/ Cognitive	–How much do you feel that people in your family understand you? –How much do you feel your family pays attention to you?

(continued)

Table 1 *(continued)*

	Paper	Country	Sample	Health-related outcomes	SC conceptualisation	Family conceptualisation	Constructs	Items
								–How close do you feel to mother/father? –Number of things have talked with mother/father about in the past four weeks. –Number of activities have done with mother/father in the past four weeks.
25	Jokinen-Gordon (2007)	United States	2003 National Survey of Children's Health	Well-being	[Family social capital] Bond between youth and their parents, encompassing, the time, efforts, resources and energy that parents invest in their youth, following Coleman (1988)	Parents and youth	–	–How close parents perceive their relationship with the youth. –Number of times in the past week that all members of the family have eaten a meal together.
26	Kirst (2007)	Canada	80 drug users	Drug-use related health behaviours	Coleman's individual-level definition of social capital, incorporating elements of Burt's (2001) and Lin's (2001) conceptualisations.	Not specified	Structure of social networks	–Name and resource generator type questions regarding: size, density, type, multiplexity and closeness. e.g. How often fo you see (name) in person? e.g. How often does (name) do a favor for you?
							Resources in social networks	–Name and resource generator type questions regarding social trust, social support (emotional, financial, informational), social learning and social norms/informal control: e.g. do you know anyone who can help you if you overdose on drugs? e.g. how often do you share needles with (name)?e.g. how many times in the last month have you used a needle after someone else had already used it?
27	Helliwell and Putnam (2004)	3 different surveys reporting data of 49 countries, including United States, Canada	Adults	Subjective well-being	Social networks and the associated norms of reciprocity and trust.	Not specified	–	Marital status Relations with the extended family
28	Novak *et al*. (2015)	Croatia	3427 17-18 years old students	Self-rated health	Resources embedded in a social structure which are accessed and/or mobilised in purposive actions	Not specified	–	Do you feel your family understands and gives attention to you?
29	Runyan *et al*. (1998)	United States	667 2-5 years old children	Well-being, developmental skills and child behaviour.	Benefits that accrue from social relationships within communities and families.	Parents	–	Presence of two parents residing within the home Presence of no more than two children in the home

(continued)

Table 1 *(continued)*

	Paper	Country	Sample	Health-related outcomes	SC conceptualisation	Family conceptualisation	Constructs	Items
30	Furstenberg and Hughes (1995)	United States	252 youth interviewed in a 20-year follow up.	Robust mental health and avoided live birth before age 19, as indicators of young adult success.	The complex and variegated social mechanisms that parents gamer to advance their children's chances of success.	Parents	Family cohesion	Do you receive/give emotional support from/ to your own mother? Do you see your siblings weekly? Do you see your grandparents weekly? Presence of biological of long-term stepfather at home Parents help with homework How often child does activities with parents Parent's expectations for school performance Mother's educational aspirations for the child Mother's encouragement of child Mother attended school meetings Number of child's friends mother knows

The nuclear family is only one possible conceptualisation of family. In many cultures – for example, in Asia as well as the Mediterranean – the definition of 'family' extends out to a much broader set of connections. The extended network of relatives in these cultures can provide different kinds of social support that certainly ought to be construed as a part of family social capital. In fact, authors like Donati (2007), Prandini (2007), Ravanera and Rajulton (2010) or Widmer *et al*. (2008), make the point and provide examples which show that the way in which family was defined in terms of structure had a great influence on the level of social capital. Besides, with the increase of divorce and remarriage and the high predominance of single parent families, it is increasingly difficult to set the boundaries of families (Buehler and Pasley 2000). Following Riera (2011), the family is the primary core of affection and protection, and as such the form that this institution takes is more and more a subjective experience. Furthermore, the problem about using the household as a proxy of the family is not only that it is likely to be incomplete (since many family members may be residing outside the household, for example, working in a foreign country and sending remittances back home), but it may also not capture what the individual feels is his or her family, as we can see in Widmer *et al*.'s (2008) work, in which some individuals identified their care-givers as family members. Whether unrelated individuals ought to be considered as 'family' members is debatable. They are certainly 'household' members, and to the extent that they share the same domicile, they could be considered as sharing the same resources, values, and norms within that environment. However, our own position is that 'family social capital' should be primarily restricted to blood ties or in-law relations. Otherwise the boundary between family and external contexts become once again blurred. For example, a group of university students sharing the same flat does not constitute family social capital; rather, their family social capital is accessed through their connections to family members who are living elsewhere. This raises the issue that virtual connections are likely to change the meaning and boundaries of social capital, but *a priori* it might appear that some geographical stability is needed in order to cultivate strong bonds.

Last, but not least, caution must be exercised in equating single parents with a lack of family social capital. Jennings and Sheldon (1985) argue that due to the high collinearity between family composition and other socioeconomic factors, it is not possible to attribute variations in health only to family structure, an observation that Lareau (2003) expands to the strong association between social class and parenting approaches. It has also been noted how informal networks of care outside the household can compensate and even provide greater care assets than the nuclear family itself (Hansen 2005), which reinforce the need of considering the whole constellation of relationships if we are to elucidate the effect of and the pathways through which family social capital on health.

Actually, few of the 29 studies reviewed discuss the mechanisms through which family social capital can affect health. Yet we can find interesting parallels with the broader discourse regarding social capital at the neighbourhood level. According to Kawachi *et al*. (2010), three mechanisms seem to mediate the relationship between social capital and health at the individual level: social influence/social control; social engagement and the exchange of social support. In our literature review, these also appear to be important with regard to the family context. In their study, Moxley *et al*. (2011) found that the main dietary decision maker within more cohesive families was more likely to make healthy choices, suggesting that strong family bonds can encourage their members to gain knowledge about health and learn how to take care of others. They also observed that families with strong ties are more prone to eat meals together where information and behaviours about healthy eating can be reinforced. Pettit *et al*. (2011), in turn, highlight the effect of closer families of protecting their children from high-risk activities (e.g. substance abuse) by facilitating their involvement in other more positive activities. Perceived closeness between parent and child was a strong predictor of youth well-being scores in the study by Jokinen-Gordon (2007); however it was not possible to elucidate whether this association was due to family social capital *per se*, or if it was the result of parents spending more time with their children.

These pathways seem coincident with the work done on family functioning and health outside the social capital approach. Family cohesion, one of the most studied dimensions of the family environment – especially from the fields of mental health and behavioural sciences, has been shown to have an important impact on different aspects of health through mechanisms such as informal control of health-related behaviours, sense of belonging and secure attachment (see Landale *et al*. 2013, Martin, 2008).

The measurement of family social capital

Table 1 illustrates the items and constructs used in the different studies that examined family social capital. Measures to capture family social capital vary to a great extent, depending on authors' definition, their notion of family, and the life stage of the respondent. In addition, similar items are used differently across studies, to the extent that the same particular item was used to measure different constructs depending on the author. For instance, the frequency of talking with family members about personal things is categorised as 'family connections' by Li and Delva (2012), as 'quality of parent-child relationship and adult interest' by Rothon *et al*. (2012), as 'parental involvement' by Pettit *et al*. (2011) and as 'family sense of belonging' by Morgan and Haglund (2009).

Also, as noted by Kawachi *et al*. (2014) a certain degree of overlap exists between the constructs used by the social cohesion and network approaches, and we may further add that this also happens with regard to the subscales. With the intention to systematise the measures employed to assess family social capital, we present in Table 2 the different items used in the papers reviewed, grouped according to different constructs and subscales widely applied in the

Table 2 *Measures of family social capital grouped according to different constructs and subscales widely applied in the study of social capital and health.*

Construct	*Subscale*	*Items*	*Adapted from*
Family cohesion	Collective efficacy	–Perception of working well as a family	Li and Delva (2011)
	Informal control	–Number of hours children are at home without any adult after school. –Frequency parents know (children) where going out in evening, –Allowance to go out with friends that your parents don't know –Parents know who the children are with when they go out. –Parents know what children are doing when they go out. –Parents setting curfew on school nights. –Number of child's friends mother knows –Frequency parents check whether you've done your homework	Bala-Brusilow (2010) Dufur *et al*. (2013) Furstenberg and Hughes, 1995) Hay (2012) Rothon *et al*. (2012) Wu *et al*. (2010)
	Social interaction	Frequency of doing the following activities along with family members: –watching TV or video –playing indoor games –doing fun things together –eating meals/eat dinner –going for a walk –going to the movies, to a concert, on a picnic . . . –working on a project –shopping –visiting friends or relatives –playing sports –sitting and talking (about things, about dates, about school problems . . .) –going to religious services –having birthday parties for children –having birthday parties for adults –Talking on the phone (with family or with specific family members) –Visiting relatives (or specific family members)	Bala-Brusilow (2010) Berntsson *et al*. (2007) Dufur, Parcel and McKune (2013) Farrel (2010) Ferlander and Mäkinen (2009) Furstenberg and Hughes (1995) Gonsalves (2007) Han (2012) Jokinen-Gordon (2007) Lau and Li (2011) Li and Delva 2012) Morgan and Haglund (2009) Morgan *et al*. (2012) Rothon *et al*. (2012). Wu *et al*. (2010)
	Sense of belonging	–Family members respect for one another –Family members get on well –Value sharing among family members –Trust among family members –Loyalty to family –Pride of family –Closeness (to family or to specific family members)	Dufur *et al*. (2013) Gonsalves (2007) Jokinen-Gordon (2007) Lau and Li (2011) Li and Delva (2011) Li and Delva (2012) Petit *et al*. (2011) Rothon *et al*. (2012)

(continued)

Table 2 *(continued)*

Construct	*Subscale*	*Items*	*Adapted from*
		–Perception of family paying attention to oneself –Satisfaction of family relationships	
Family support	Emotional support	–Facility to talk to family or to specific family members –Facility to open up and talk about worries (to family or to specific family members) –Reliability on relatives for help with serious problems –Receiving counselling (from family or specific family members) –Perception of empathy (from family or specific family members) –Receiving/giving love and warmth (from family or from specific family members)	Eriksson *et al*. (2012) Farrel (2010) Furstenberg and Hughes, 1995) Glendinning and West (2007) Gonzalves (2007) Li and Delva (2011) Li and Delva (2012) Litwin (2011) Morgan *et al*. (2012) Pettit *et al*. (2011) Rothon, Goodwin and Stansfeld (2012) Widmer *et al*. (2013) Novak (2015)
	Instrumental support	–Parents helping with homework –Mother/father (asked separately): helps me as much as I need; –She/he usually helps me if there is something I don't understand	Farrel (2010) Kirst (2007) Morgan *et al*. (2012) Wu *et al*. (2010
	Family conflict	–Frequency in which family make too many demands –Frequency of critiques between family members –Frequency of arguing –Personal goals conflicting those of the family –Feelings of loneliness and isolation because of lack of family unit	Li and Delva (2010) Li and Delva (2012) Litwin and Sciovitz-Ezra (2011) Litwin (2011) Widmer, Kempf, Sapin and Galli-Carminati (2013)
Family network	Network structure	–Extension: number of members of the network –Density: Number of connections within the network –Centrality: Proportion of connections within the network for which the respondent is an intermediary.	Bala-Brusilow (2010) Bassani (2008) Ferlander and Mäkinen (2009) Furstenberg and Hughes, 1995) Gonsalves (2007) Helliwell and Putnam (2004) Keating and Dosman (2009) Litwin (2011) Litwin and Shiovitz-Ezra (2011)

(continued)

Table 2 *(continued)*

Construct	*Subscale*	*Items*	*Adapted from*
			Litwin and Stoeckel (2014) Runyan *et al*. 1998) Widmer *et al*. (2013)
	Quality of family ties	–gender composition –age composition –Relationship composition (lone spouse, children at home, spouse and children, close relatives, step-parents) –Proximity: proportion of cited persons living within a specific distance range. –Frequency of contact –Emotional closeness: proportion of cited persons with whom the respondent feel very or extremely close –Employment	Bala-Brusilow (2010) Bassani (2008) Ferlander and Mäkinen (2009) Furstenberg and Hughes (1995). Helliwell and Putnam (2004) Keating and Dosman (2009) Kirst (2007) Litwin (2011) Litwin and Sciovitz-Ezra (2011) Litwin and Stoeckel (2014) Runyan *et al*. (1998) Widmer *et al*. (2013)

study of social capital and health at other scales as proposed by Lochner *et al*. (1999) and Kawachi and Berkman (2014).

Measures used in the family cohesion approach include items grouped into four subscales: collective efficacy, informal control, social interaction and sense of belonging.

Collective efficacy has been defined by Zaccaro *et al*. (1995) as 'a sense of collective competence shared among individuals when allocating, coordinating and integrating their resources in a successful concerted response to specific situational demands'. Only one article in our sample assessed collective efficacy as an indicator of family social capital. In their investigation about the association between social capital and smoking behaviour, Li and Delva (2011) asked their participants about their perception of working well as a family, as a part of a family cohesion scale. They measured social capital through different measures of individual social connectedness and subjective assessment of family and neighbourhood environment (i.e. family and neighbourhood cohesion, family conflict). Results of multivariate logistic regression analyses showed increased odds of smoking only for family conflicts or higher levels of connectedness with family members.

Indicators of informal control have been only used in studies conducted in adolescents with regard to mental health outcomes. Wu *et al*. (2010) and Rothon *et al*. (2012) conceptualised informal control as 'parental surveillance or monitoring' using measures such as the frequency that parents know teenagers are going out in the evening, whether teenagers were allowed to go out with friends parents do not know, and the frequency parents checked teenagers' homework. In both cases, an association was found between high levels of parental surveillance and

lower odds of poor mental health and depressive symptoms. In the study by Furstenberg and Hughes (1995), the specific relationship between their measure of informal control and mental health is not described, but their results suggest that family social capital is indeed associated with more robust mental health in adulthood.

The dimension most widely measured among the papers drawing upon the social cohesion approach is social interaction and they basically capture activities that families (or specific family members) do together. Some of them ask whether certain activities are done in the family (yes/no answer) and others refer to the frequency. Activities here are very diverse and include, among others, sitting and talking, watching TV, going for a walk, going to a concert, going on a picnic, going to the movies, playing sports, working on a project, having birthday parties or eating meals together (Bala-Brusilow 2010, Berntsson *et al*. 2007, Dufur *et al*. 2013, Farrell 2010, Ferlander and Maekinen 2009, Furstenberg and Hughes 1995, Gonsalves 2007, Han 2012, Jokinen-Gordon 2007, Lau and Li 2011, Li and Delva 2012, Morgan and Haglund 2009, Morgan *et al*. 2012, Moxley *et al*. 2011, Rothon *et al*. 2012, Wu *et al*. 2010) . Morgan and Haglund (2009) did not find a significant association between family social interaction and life satisfaction in teenagers, but other studies showed a positive effect between doing joint activities with family and health-related outcomes such as overall self-reported health (Ferlander and Maekinen 2009, Morgan *et al*. 2012), the likelihood of obesity in children (Bala-Brusilow 2010) or the consumption of fruits and vegetables (Morgan *et al*. 2012). Particularly, having at least a meal together was related with better mental health (Rothon *et al*. 2012), and lower odds of depression (Wu *et al*. 2010).

The last subscale capturing family cohesion is sense of belonging. Sense of belonging is a psychological construct that can be defined as 'the experience of personal involvement in a system or environment so that individuals feel themselves to be an integral part of that system or environment' (Hagerty *et al*. 1992). In the papers we reviewed it has been operationalised through family members' respect for one another, value sharing, trust, loyalty, pride, satisfaction and closeness. In teenagers, when measured by parental relationships satisfaction and parental perceived closeness to the child, it was significantly associated with improved mental health (Rothon *et al*. 2012) and wellbeing scores (Jokinen-Gordon 2007). However, research by Li and Delva (2011, 2012) did not show any association between sense of belonging (measured using a combination of different items, namely value sharing, respect, pride and closeness, among others) and smoking habits among Asian Americans.

Turning to the measures used within the network approach, two constructs capture social capital: social networks and social support. Social networks represent the structure and nature of social relationships, while social support denotes the resources embedded in those networks and accessed by members. According to Lindgren (1990: 469) social support 'allows one to believe that he or she is cared for and loved, esteemed and valued, and belongs to a network of mutual obligation'. She is here referring to emotional social support, but other subtypes of social support are normally identified, including emotional but also instrumental, appraisal and informational support (House 1981). In our categorisation we have also incorporated negative social support, since it was used in several papers. By contrast, none of the studies referred to informational support as a relevant part of family social capital.

Emotional family support was the subscale more widely used to assess social support. Questions about the ease of talking to and relying on family members when facing serious problems or worries, perceptions of empathy and receiving counselling were asked to all ages ranges and in general results showed differences in correlations with health outcomes. Eriksson *et al*. (2012), found in their study on Swedish children that the ease of talking to parents explained about 6 per cent of the variance in subjective health complaints as well as 10 per cent of the variance in subjective wellbeing, with higher levels of emotional support associated

with lower levels of subjective health complaints as well as higher levels of subjective wellbeing. By contrast, Litwin's (2011) paper on the association between social network relationships and depressive symptoms among older Americans reported no relation between the perceived family network quality variables and the presence of a high level of depressive symptoms. Introducing a gender perspective, results of a study on smoking behaviours among Asian Americans by Li and Delva (2011) showed that higher levels of family connectedness (as measured by the frequency of talking on the phone or getting together, the reliance on relatives when having a serious problem, and the possibility of opening up to family members to talk about worries) were associated with increased odds of being a current smoker and that this correlation was stronger for women than for men. Even if the cross-sectional nature of this study makes necessary to take these results cautiously, they are aligned with other literature on the double-edged nature of social capital (Portes and Landolt 2002, Moore *et al*. 2009). It is distinctly possible that being closely connected to other family members may result in a downside to health if others also happen to be engaged in unhealthy behaviours. In other words, social reinforcement is a powerful influence on health behaviours; if your parents are smokers, children who feel close to them may express their solidarity by smoking with them.

Alternatively, Li and Delva (2012) hypothesise that the higher likelihood of smoking found in Asian American women with higher levels of family connectedness may be the result of greater levels of stress rather than a negative effect of emotional family support, since women are more prone than men to share their distress with family members and friends.

Instrumental support refers to the exchange of help, aid or assistance with tangible resources such as labour in kind or cash (Berkman and Glass 2000, House 1981). Two of the papers reviewed assessed instrumental support, both among teenagers. Wu *et al*. (2010) asked whether parents helped children with homework, while the question by Morgan at al. (2012) was much more open-ended: 'Mother/father (asked separately) help me as much as I need'. In both studies, instrumental support was related with positive health effects, namely fewer depressive symptoms and better life satisfaction. Wu *et al*. (2010) noted that family social capital had not only a direct effect on depressive symptoms, but it also functioned as an important mediator between contextual factors and this mental health outcome, providing significant clues on how parents can modulate the effect of family economic conditions, parent's educational attainment and the resources available at the neighbourhood.

Family conflict was assessed in five of the papers in our sample, conceptualised primarily as family members making excessive demands or having conflicting goals. Again, studies by Li and Delva (2011, 2012) showed higher odds of smoking in Asian Americans to be associated with family conflict. Studies by Litwin (2011), Litwin and Stoeckel (2014) Litwin and Shiovitz-Ezra (2010) and Widmer *et al*. (2013) explore how different network configurations relate to psychological outcomes in older and intellectually disabled individuals. They compare the composition of these networks in terms of family members, acquaintances, friends and even professionals, confirming that more diverse networks in terms of their members (i.e. more bridging social capital) provide greater health benefits.

Studies of family networks fall roughly into two groups. One group of studies, following the work by Coleman (1988), considers marital status, the number of adults, and number of children in the household (Ferlander *et al*. 2009, Furstenberg and Hughes 1995, Helliwell and Putnam 2004, Runyan *et al*. 1998). Another group of studies by Keating and Dosman (2009), Litwin (2011, 2014), Litwin and Shiovitz-Ezra (2010), Litwin and Stoeckel (2014), Moxley *et al*. (2011), and Widmer *et al*. (2013) draw upon network analyses and delve deeper into the study of family ties, also considering dimensions such as density (the number of connections within the network) and centrality (the proportion of connections within the network for which respondent is an intermediary). Concerning the set of papers studying family networks in adults, both

the density and diversity of family ties appear to have a positive effect on health. In children, the main measure used has been the ratio of children/adults as an indicator of the availability of parental resources allocated within the family. However, no strong relationships were found between this measure and health outcomes in terms of overall wellbeing or mental health, contrary to the seminal results by Coleman (1988) in the realm of educational achievement.

There are a few items that, in our opinion, do not properly belong to the construct of social capital. For example, the mother's educational aspirations for the child does not seem to be a direct measure of family social capital. While for some, they might be understood as an asset which children can benefit from (Furstenberg and Hughes 1995, Rothon *et al*. 2012), we are close to Morrow's (1999) theoretical model of the relationships between social capital and child welfare outcomes in which social capital (within and outside the family) is assessed by the extent of networks, support received from those networks, perceived trust and reciprocity, shared norms and balance of bonding versus bridging social capital. Parental values and norms, as well as parental decisions to invest in a child would be here intermediate variables that can be conditioned by social capital, but would not be social capital *per se*.

Discussion

The present review is, to our knowledge, the first attempt to systematise the study, conceptualisation and measurement of family social capital in the health sciences. With the growing interest on the effects of social capital on health and the recognition that the social capital embedded in different contexts is associated differently with health outcomes, we suspect that more scholarship on how family social capital affects health is long overdue.

Of course, there is a large body of research on family functioning and health from disciplines such as psychology and social work, but the approaches notably tap into different elements of family life. These divergences become evident when one explores two of the most widely used questionnaires to assess family functioning in psychology: the Family Adaptability and Cohesion Evaluation Scale (FACES; Olson *et al*. 1979) and the Family Environment Scale (Moos and Moos 1994). Family cohesion is a central element in both approaches, but they clearly differ in their attention to dimensions such as adaptability, communication and parental styles – highlights from the psychological point of view – or social networks and social support from the social capital perspective. As discussed above, the focus on family can provide a more integrative approach to understanding how this institution and its links with other community resources and organisations can influence health.

The first step in this endeavour should be to clearly delimit what is 'family'; which is not an easy task, as previously argued. For us, family should be confined to blood and in-law relationships, always taking into account cultural variations in the degree of separation that people consider for inclusion within the bounds of family. For instance, in Spanish culture it is quite common for the definition of 'family' to extend to one's grand-parent's cousins, while this might not be valid in other cultures. In this sense, the definition of family itself would be a great differentiator of the social capital that can be accessed.

It has been almost two decades since Coleman first introduced the notion of family social capital; yet in the field of public health, most of the attention has been devoted to neighbourhood social capital (and more recently, workplace social capital). Some limitations of Coleman's initial conceptualisation have been noted and overcome. Yet, other questions remain to be figured out. Authors like Harpham *et al*. (2002), Morrow (1999) and White (2008) have argued persuasively for considering children as active agents within the social capital discourse. Also the family social capital of adults and the elderly is increasingly being studied. Nonetheless, there is still

a lack of recognition of social capital provided by siblings. This is a tendency with roots in Coleman's work, in which a greater number of children was interpreted as diluting parental attention, thus diminishing the resources available to them. In contrast to this view, siblings can play an important role in family social capital from childhood to adulthood by increasing the network size and substituting for resources that parents may not be able to offer in different stages of life, from help in doing homework, to cash loans or emotional support. Above all, a life-course approach needs to be adopted in the study of (family) social capital, as factors influencing health behaviours (not only social influence but also the existence of social norms and shared values and social modelling) are expected to operate distinctly at different stages of life (Coleman 1988, Laub and Sampson 1993, Rackett and Davison 1995).

The mechanisms through which family social capital promotes (or hinders) health behaviours and outcomes is something that needs to be further investigated too. A good starting place is to consider the mechanisms that have been put forward for social capital in other contexts, such as neighbourhoods. From childhood, families provide instrumental and affective-cognitive support that will influence children's health and well-being beyond adolescence (Norton *et al*. 2003, Schor and Menaghan 1995). In adulthood, more cohesive communities – and the same could be expected from family – help their members to cope with stressful situations, can be a significant source of information influencing health and can shape health-related behaviours through informal control and peer influence. Mixed results on the effect of peer influence have been identified for different health behaviours. Christakis and Fowler found that obesity has a contagious effect through social networks – increasing the odds of being overweight when people to which one is connected is obese (Christakis and Fowler 2007), while the effect is the opposite with regard to smoking cessation: when an individual stops smoking there is an increase in the probability that his close contacts will stop smoking too (Christakis and Fowler, 2008).

In this way, those interested in studying family social capital and its relation to health should aim at using measures to estimate not only the global level social capital in this context, but also the different constructs, social cohesion and social networks, and their respective sub-scales, as they are likely to be differently related to health outcomes. The development and validation of instruments to such aim is essential in this process.

There is also an urgent need to understand the downside of family social capital. Portes and Landolt (2002) put light into the so called 'dark sides' of neighbourhood social capital, which included in excessive demands by the members of cohesive groups, restrictions on individual freedom, exclusion of out-group members, and the down-levelling of members' aspirations. In our reviewed papers only Litwin (2011) tried to capture some of these downsides, but it seems likely that family social capital – like other forms of social capital – can have both health-promoting and health-damaging aspects.

In summary, our findings are consistent with the notion that family social capital is multidimensional and that its components most likely have distinct effects on health. In agreement, we identify four main directions for future research on family social capital and health: (i) the investigation of whether family structure may condition social capital; (ii) research including the different constructs and subscales of social capital, that may allow to further understand how each of these are associated with different health outcomes; (iii) the adoption of a life-course approach that considers the contribution that all the members in the network make in the creation of social capital, as well as the possible different relationship of each social capital indicator and health at different ages and (iv) the consideration of the dark side of social capital.

Ultimately, a social capital approach may shed light on how the family is a critical context that lies between the individual and more upstream contexts, including neighbourhoods and the state, and can provide clues to develop upstream politics for healthier environments. As noted by Litwin and Stoeckel (2014) since notable differences exist in the family dynamics

among countries, family social capital could also be an added element to take into account when explaining cross-country health differences.

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Notes

1 Scholars using the social cohesion approach include Robert Putnam, Francis Fukuyama and Ichiro Kawachi.
2 Scholars advocating for the social network perspective comprise Pierre Bourdieu, Richard Carpiano, Nan Lin and Spencer More.
3 Besides these two main dimensions, Coleman also talked about additional manifestations of social capital, namely: (i) obligations, expectations and trustworthiness of structure; (ii) information channels; (iii) norms and effective sanctions; (iv) closure of social networks and (v) appropriable social organization, which could also be thought of as subconstructs of social capital or potential mechanisms through which social capital influences health.

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