



Elderly social health Evaluation

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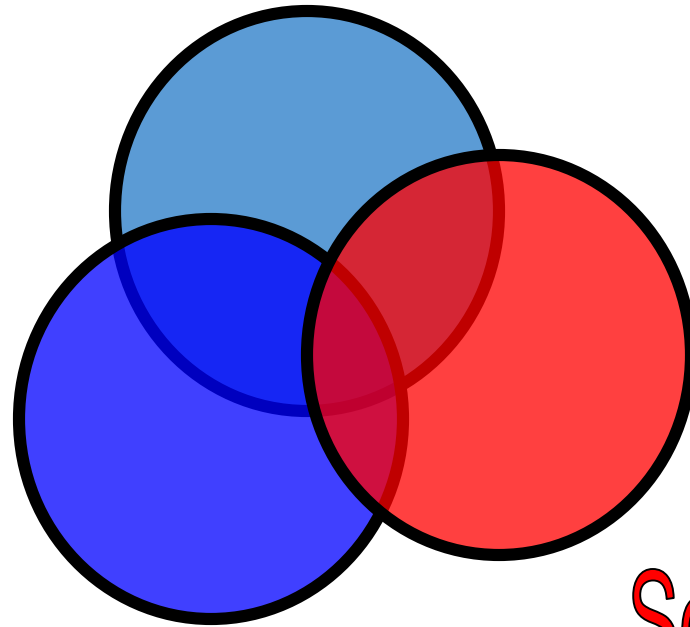
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Health definition

- In 1947, the WHO defined health as “. . . a state of complete physical, mental and *social* well-being and not merely the absence of disease or infirmity” ([Glenn and Weaver, 1979](#)).
- In 1977, psychiatrist George Engel built on this definition, calling for a new, bio-psychosocial model ([Engel, 1977](#)).
- Since then others have called for conceptualizations of health expanded to include positive health (Ryff and Singer, 1988) or successful aging ([Rowe and Kahn, 1997](#)), although these more inclusive definitions have rarely been applied to understanding the health of individuals or populations.

Physical



Psychological

Social

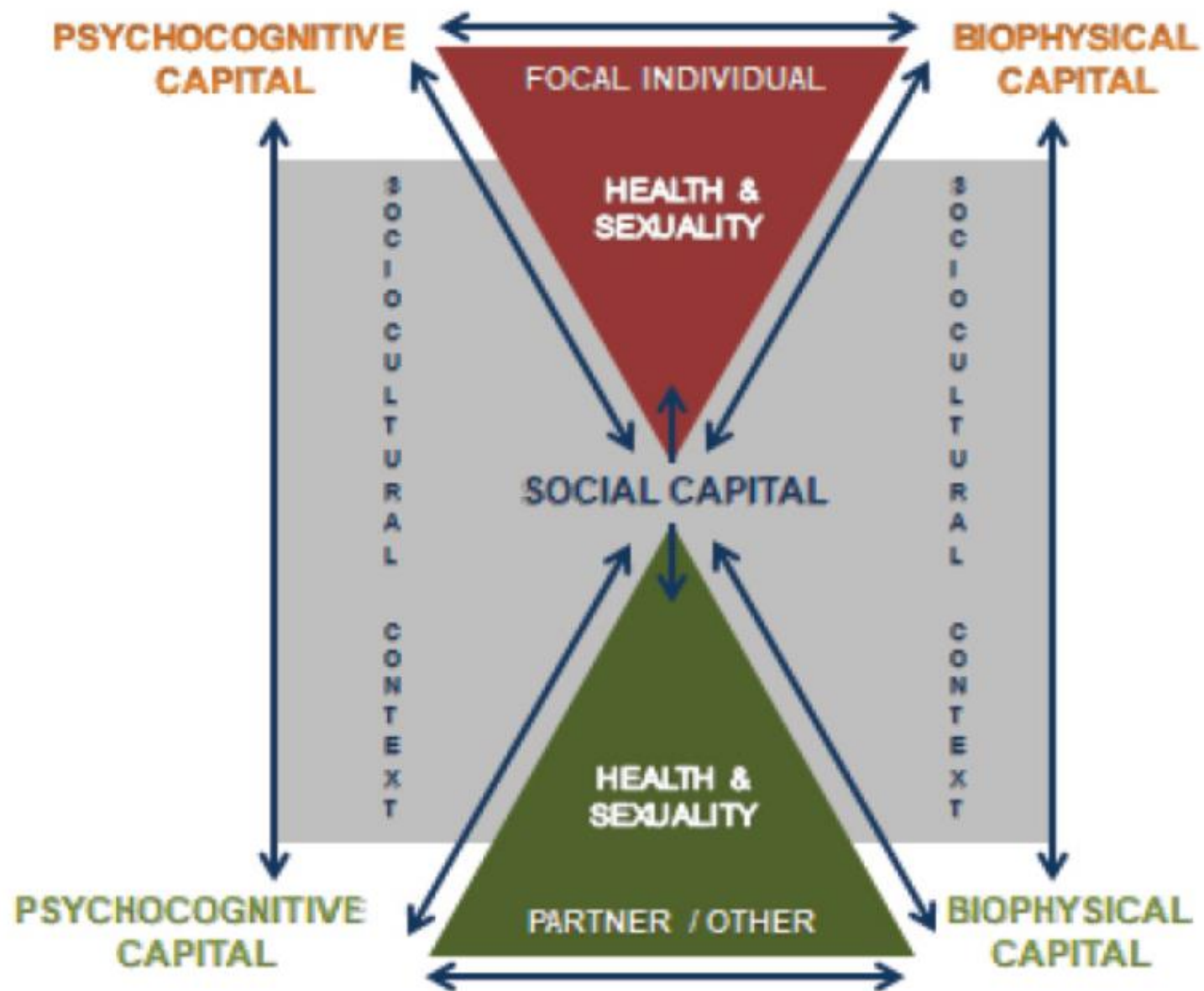


FIGURE 4-1 A model for the interaction among the biophysical, psychocognitive, and social aspects of overall health and well-being

Biopsychosocial (BPS) model

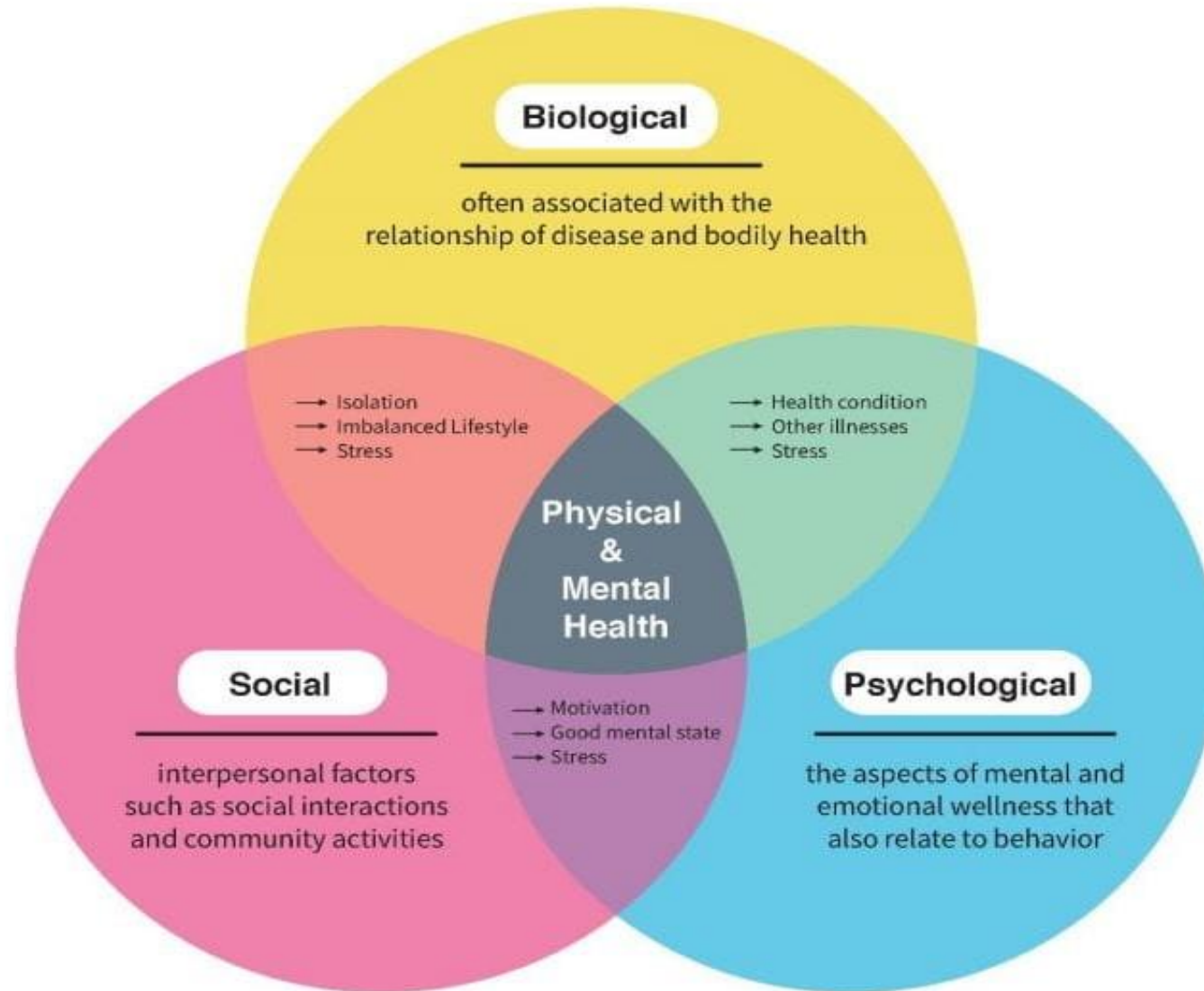
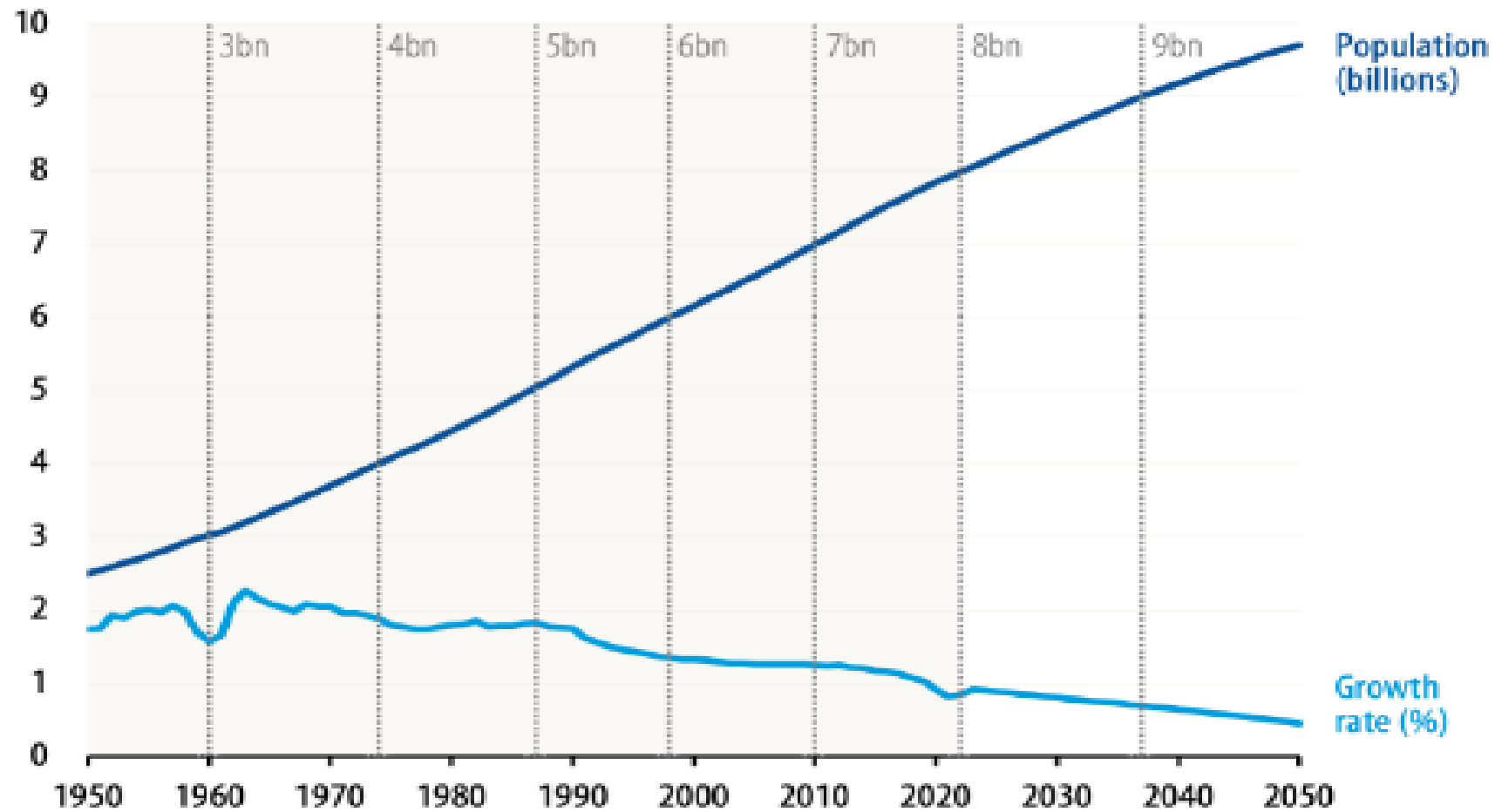


Chart 1

Population boom fizzling

Even as global population passes 8 billion, the rate of growth continues to decline.



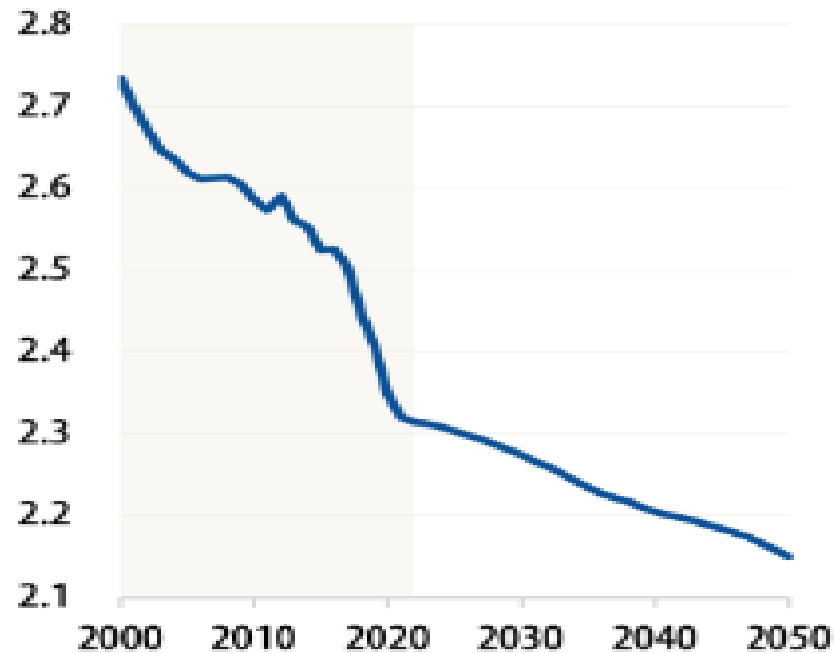
Sources: United Nations Department of Economic and Social Affairs, Population Division, World Population Prospects, 2022 Revision.

Chart 2

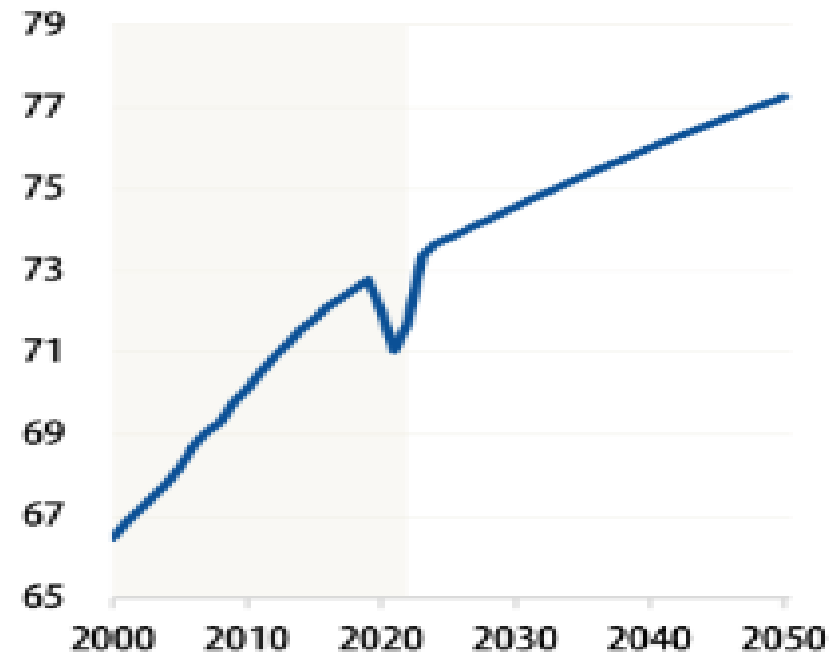
Aging population

People are living longer and having fewer children, leading to a greater proportion of elderly in the population.

Total fertility rate, worldwide
(births per woman)



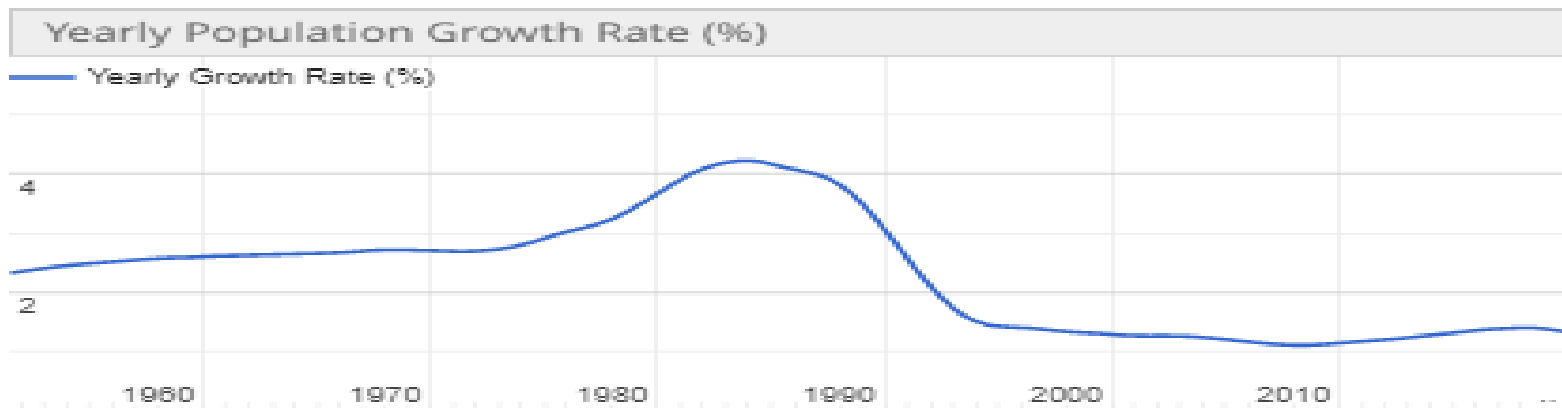
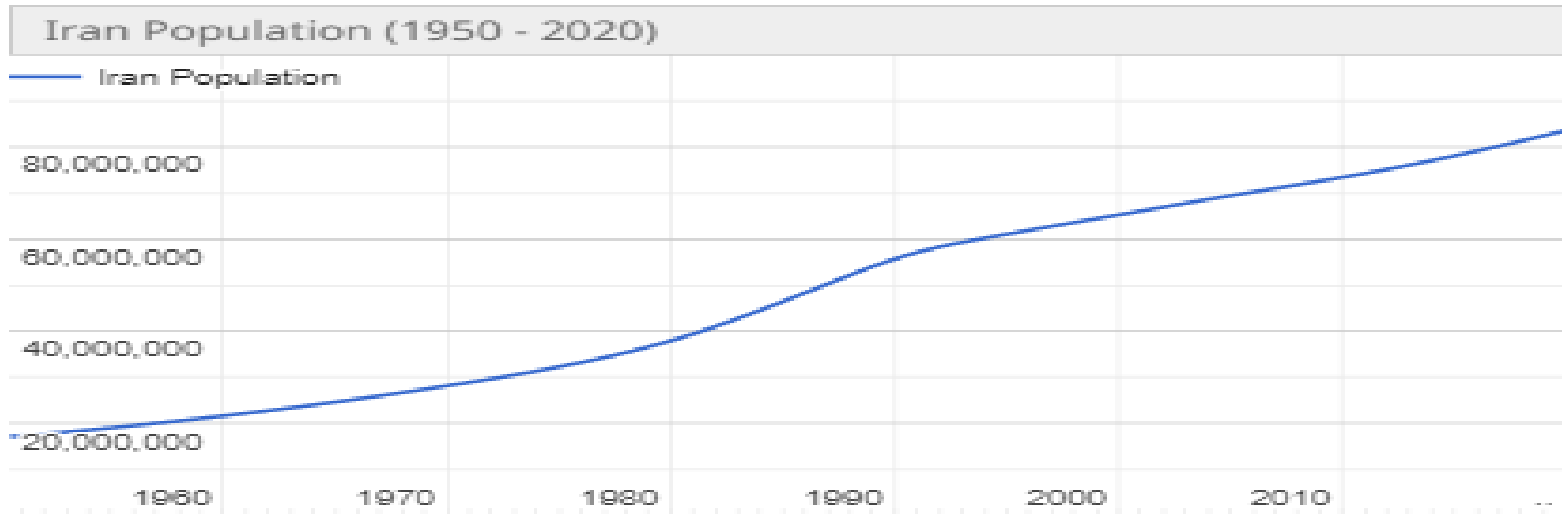
Life expectancy at birth, worldwide
(years of life expectancy)



Sources: United Nations Department of Economic and Social Affairs, Population Division, World Population Prospects, 2022 Revision.

Iran Population (LIVE)

86,740,252



Population of Iran (2020 and historical)

Year	Population	Yearly % Change	Yearly Change	Migrants (net)	Median Age	Fertility Rate	Density (P/Km ²)	Urban Pop %	Urban Population	Country's Share of World Pop	World Population	Iran Global Rank
2020	83,992,949	1.30 %	1,079,043	-55,000	32.0	2.15	52	75.5 %	63,420,504	1.08 %	7,794,798,739	18
2019	82,913,906	1.36 %	1,113,718	-55,000	30.1	1.96	51	75.3 %	62,439,455	1.07 %	7,713,468,100	19
2018	81,800,188	1.40 %	1,126,305	-55,000	30.1	1.96	50	75.1 %	61,425,055	1.07 %	7,631,091,040	19
2017	80,673,883	1.39 %	1,109,894	-55,000	30.1	1.96	50	74.8 %	60,380,188	1.07 %	7,547,858,925	19
2016	79,563,989	1.37 %	1,071,774	-55,000	30.1	1.96	49	74.5 %	59,308,845	1.07 %	7,464,022,049	18
2015	78,492,215	1.25 %	945,939	-100,469	29.7	1.91	48	74.2 %	58,217,032	1.06 %	7,379,797,139	18
2010	73,762,519	1.12 %	800,034	-115,380	27.0	1.82	45	71.4 %	52,664,138	1.06 %	6,956,823,603	17
2005	69,762,347	1.23 %	827,788	-9,689	24.1	1.92	43	68.2 %	47,575,374	1.07 %	6,541,907,027	17
2000	65,623,405	1.33 %	836,148	-43,670	21.2	2.40	40	64.5 %	42,352,090	1.07 %	6,143,493,823	17
1995	61,442,664	1.74 %	1,015,289	-179,685	18.6	3.70	38	59.4 %	36,488,609	1.07 %	5,744,212,979	16
1990	56,366,217	3.55 %	1,803,806	299,446	17.2	5.62	35	56.2 %	31,672,465	1.06 %	5,327,231,061	19
1985	47,347,186	4.14 %	1,739,388	401,534	17.2	6.53	29	53.4 %	25,278,712	0.97 %	4,870,921,740	22
1980	38,650,246	3.38 %	1,184,095	80,664	18.0	6.28	24	49.7 %	19,215,536	0.87 %	4,458,003,514	22
1975	32,729,772	2.80 %	843,181	15,527	18.1	6.24	20	45.7 %	14,973,153	0.80 %	4,079,480,606	25
1970	28,513,866	2.70 %	711,799	10,351	17.7	6.68	18	41.2 %	11,751,335	0.77 %	3,700,437,046	25
1965	24,954,873	2.64 %	609,592	-1,568	18.0	6.91	15	37.1 %	9,250,486	0.75 %	3,339,583,597	27
1960	21,906,914	2.57 %	522,557	-389	19.6	6.91	13	33.7 %	7,390,258	0.72 %	3,034,949,748	26
1955	19,294,127	2.42 %	434,972	-218	20.9	6.91	12	30.6 %	5,895,032	0.70 %	2,773,019,936	27

Source: **Worldometer** (www.Worldometers.info)

Elaboration of data by United Nations, Department of Economic and Social Affairs, Population Division. [World Population Prospects: The 2019 Revision](#). (Medium-fertility variant).

Table 1

World demographic characteristics

Country groupings	Population, millions (share of world pop., %)	Total fertility rate	Life expectancy at birth, years	Share of international migrants in pop.*, %	Share of pop. ages 65+, %	Share of pop. ages 80+, %	Ratio of working-age pop. to non-working-age pop.**	Share of pop. living in depopulating countries, %
World	7,975 (100%)	2.3	71.7	3.6	9.8	2.0	1.3	26.1
High-income	1,251 (15.7%)	1.6	80.9	14.7	19.2	5.3	1.4	33.2
Upper-middle-income	2,526 (31.7%)	1.5	76.0	2.0	12.2	2.2	1.6	64.3
Lower-middle-income	3,432 (43%)	2.6	67.0	1.0	6.1	0.9	1.2	1.3
Low-income	738 (9.2%)	4.5	63.0	1.8	3.1	0.4	0.8	0.0
Africa	1,427 (17.9%)	4.2	62.2	1.9	3.5	0.4	0.9	0.0
Asia	4,723 (59.2%)	1.9	73.2	1.8	9.6	1.8	1.5	34.3
Europe	744 (9.3%)	1.5	77.4	11.6	19.6	5.4	1.5	60.2
LATAM and the Caribbean	660 (8.3%)	1.8	73.8	2.3	9.2	1.8	1.5	2.3
Northern America	377 (4.7%)	1.6	78.7	15.9	17.3	4.0	1.4	0.0
Oceania	45 (0.6%)	2.1	79.2	22.0	12.9	3.1	1.3	0.1

Sources: United Nations Department of Economic and Social Affairs, Population Division, World Population Prospects, 2022 Revision and International Migrant Stock 2020; World Bank, GNI Per Capita Operational Guidelines & Analytical Classifications.

Note: *Data as of 2020. **Ratio of ages 20–64 to ages 65+ and below 20. LATAM = Latin America.

Age Related Vulnerabilities

Common experiences in later life raise the risk that someone will develop a behavioral health disorder or... worsen existing problems

- Physical
- Functional
- Social
- Mental
- Emotional

Change Can Become Risks

Health

Mobility

Residence

Loss of loved ones Insurance concerns

Memory

Financial circumstances

Changes to self esteem

Family dynamics

Dependence on others
status

Social network Marital

Role in community

Senses

Physical appearance

Leisure time

Employment

Metabolism

Later Life Risk Factors

- Illness – diabetes, heart disease, cancer, stroke
- Serious disability, Conditions that are painful
- Sensory loss
- Sleep problems
- Cognitive impairment
- Polypharmacy
- Compounded / significant loss and stress
- Fewer resiliency / adaptation / coping skills

The Social health importance

- Humans are an eminently social species and our propensity to live in groups has a genetic basis (Donaldson and Young 2008). In addition, human sociality modulates, and it is in turn modulated by culture and individual choices. Sociality exposes individuals to a variety of other people, and over time such contact may give rise to a common culture. A common culture can then affect the ways in which individuals continue to interact into the future.

The Social health importance

- The recognition that the ageing process varies not only according to biological but also to social, cultural, and historical factors has been made explicit through various theoretical models such as Age Stratification theory: old people can be seen as belonging to specific cohorts that may be distinguishable through various stages of history, in spite of some internal diversity; and Life Course theory: old people in the present can be seen as a point in a life course process, which is an age-graded pattern of events that are embedded into social institutions and a historical context (Elder et al. 2003).

The Social health importance

- the need for a shared sense of morality and common purpose; aspects of social control and social order; the threat to social solidarity of income and wealth inequalities between people, groups and places; the level of social interaction within communities or families; and a sense of belonging to place. By implication, a society lacking cohesion would be one which displayed social disorder and conflict, disparate moral values, extreme social inequality, low levels of social interaction between and within communities and low levels of place attachment (Forrest and Kearns 2001, p. 2128)

Social health definition

- Social health can be defined as our ability to interact and create meaningful relationships with others. It also depends on how easily we can adapt in social situations. Social relationships affect our mental health, physical health and mortality risk.

Social health definition: Keyes` definition

- How to evaluate and recognize a person's performance in society and the quality of his relationships with other people, relatives and social groups of which he is a member.
- According to Keyes and Larson, social health is an abstract concept that is a relative evaluation of human relationships with self, society and values.

Social health indicators

- Having assertive skills rather than passive or aggressive skills
- Creating balance in social and personal dimensions
- Interaction with other members of the community
- Adaptability in social situations
- Being yourself in all situations
- Treat others with respect
- Ability to create and maintain friendships and networks
- Establish boundaries in friendships to encourage communication and conflict management
- Having a support network of family and friends
- Enjoy life

The Social Dimension of Older Ages

- Keyes (1998) conceived of a five-component model of social well-being:
 - social integration
 - social contribution
 - social coherence
 - social actualization
 - social acceptance

The Social Dimension of Older Ages

- **social integration**
- the evaluation of the quality of one's relationship to society and community

The Social Dimension of Older Ages

- **social contribution**
- the evaluation of one's social value; it includes the belief that one is a vital member of society, with something of value to give to the world

The Social Dimension of Older Ages

- **social coherence**
- the perception of the quality, organization, and operation of the social world, and it includes a concern for knowing about the world

The Social Dimension of Older Ages

- **social actualization**
- the evaluation of the potential and the trajectory of society; it is the belief in the evolution of society and the sense that society has potential which is being realized through its institutions and citizens

The Social Dimension of Older Ages

- social acceptance
- trusting others, holding positive opinions about other people.

The Social Dimension of Older Ages

- Partners and the family are first in line as potential social factors that can contribute to elders' well-being, but the community at large, including friends and acquaintances, can also become important, especially if direct family members are not available.

The Social Dimension of Older Ages

- Family, friends, and acquaintances, as well as local and national government and non-government organizations provide the social network that can facilitate (and sometimes difficult) the achievement of individual daily goals and the performance of various activities, along with the fulfillment of more long-term plans. This remains true at any age including, of course, old age.

PRESENCE/QUALITY OF SOCIAL RELATIONSHIPS

- By social relationships we mean any ongoing connection between two or more people. The most fundamental of these are the parent-child relationship and the intimate partner relationship. Together they comprise the family, the foundational social institution in human society (Coontz, 2008; Waite, 2005).
- The consequences of strong and positive bonds between parents and children have widely recognized consequences for the physical, psychological, cognitive, and financial well-being of both generations across the life course (Maccoby, 1980). Finding and keeping a mate in an intimate partnership is one of the key developmental tasks of adulthood (Kaufman, 2018), and a successful partnership, some argue, leads to better health of both members of the dyad across all dimensions of health (Waite and Gallagher, 2000).

. SOCIAL NETWORKS

- People are connected to others in a variety of ways, from kin relationships to socializing to exchanges. Social networks are created by webs of connections among groups of people, so the social network of an individual includes that person's connections to others and the connections of those other people to each other (Cornwell et al., 2009).
- Berkman et al. (2000) developed an elegant conceptual model of the links between macro-level social forces, social networks, psychosocial factors, and pathways to health.

Social networks

- a structure of individuals with a designed relationship to the focal person, as well as an average frequency of contact and a specified geographical proximity to that person. Social networks can be thought of as a key resource over the life course, a form of social capital that potentially influences the exchange of supports (Ajrouch et al. 2001, p. S112).
- Social networks can be somewhat stable, or they can be variable and fluid. Moreover, because the network can influence the individual both positively and negatively, sometimes a loose social network can be of more benefit to the individual than a tighter and more restrictive one (Granovetter 19

SOCIAL PARTICIPATION

- The social participation dimension of social well-being is generally defined as attending organized groups or gatherings. These gatherings might include religious services or meetings of clubs, exercise groups or bowling leagues, playing on a sports team, singing in a choir, being a member of a book club, or being active in a local political or community organization. All involve participating in an organized group with others. One could participate in social events by getting together with family, going out with friends, or attending a neighborhood potluck. And volunteering in a soup kitchen, as a docent in a museum, or at the information desk in a hospital all involve organized groups of people doing things together. Social participation creates weak links between people, may link participants to sources of support—or provide support to others.

SOCIAL PARTICIPATION

- Social participation is linked to better sleep among older adults (Chen et al., 2016), to better cognitive function (Bowling et al., 2016; Kotwal et al., 2016), to lower or higher levels of depression, depending on the type of organization in which one participates (Croezen et al., 2015), to health behaviors (Lindström et al., 2001), and to preservation of general competence. Social participation is almost always measured by asking respondents whether they participate in various social activities and if so, how often they participate. This could change with the application of tracking technology such as GPS on smartphone, tracking of movements of individuals using cell phone records, use of social media to track searches, and use of data from cameras or tracking devices in public places

SOCIAL ISOLATION/LONELINESS

- Loneliness and social isolation, important indicators of social health, are related, often confused with each other, but not the same thing.
- Loneliness is the subjective assessment that one's social relationships are lacking, perhaps profoundly so. Lonely people feel that they lack companionship, don't have a circle of friends, and often feel left out.
- Socially isolated people may not have many close connections but may feel just fine about it.
- Lonely people feel left out and isolated, that no one has their back. Thus they tend to surveil their social surrounding for risk and to perceive social threats in ambiguous situations.

SOCIAL ISOLATION

- Social isolation may mean few sources of emotional or instrumental support. With fewer resources at their disposal, the socially isolated may face more sources of stress than others and have fewer means to alleviate that stress. Those with relatively little contact with others have fewer sources of information and influence to aid in decision making, potentially affecting health behaviors, health care usage, and socially contagious behaviors such as alcohol use, smoking, diet, exercise, and obesity (Smith and Christakis, 2008; Yang et al., 2013). Steptoe et al. (2013)
- The socially isolated face higher risks than the well-connected of poor sleep, unhealthy behaviors such as alcohol use and smoking, obesity, early cognitive decline and Alzheimer's disease, poor mental health including depression, poor self-rated health, and early mortality (Hawkley and Capitano, 2015; York Cornwell and Waite, 2009a).

SOCIAL ISOLATION

- Being lonely or objectively socially isolated is a source of stress, increases exposure to other stressors, and exacerbates their effects. The socially isolated are cut off from sources of instrumental, emotional, advisory, financial, or other support.
- Social isolation works to affect other domains of health through mechanisms other than stress. The socially isolated are more likely than others to live alone, to be unmarried, to have small social networks, to participate in few groups, to have few friends, and to socialize infrequently (York Cornwell and Waite, 2009a).

Measuring Objective Social Isolation

- Since being objectively isolated means having relatively few people around one, a fairly vague concept, there are many ways to measure it. York Cornwell and Waite (2009a) created a factor score from number of friends, characteristics of one's social network, frequency of getting together with friends, family, neighbors, attending meetings of organized groups, and volunteering. Social isolation has also been measured as living alone, being unmarried/unpartnered, or having infrequent contact with others, small social networks, or perceptions of low social support (Berkman et al., 2000; House et al., 1988; Ertel et al., 2008). McPherson and colleagues (2006) operationalized social isolation as not having a confidant: someone to talk to about matters that are important to one.

Social network characteristics

Social network size (range = 0–5, 6 or more)

Social network range (number of types of relationships in the network; range = 0–5)

Proportion of social network members who live in the household (range = 0–1)

Average frequency of interaction with network members (range = 0–1 where 0 = *the respondent does not contact any alters* and 1 = *respondent contacts all alters every day*)

Average closeness with network members (average of responses across all alters, where 1 = *not very close*, 2 = *somewhat close*, 3 = *very close*, and 4 = *extremely close*)

Living arrangements

Household size (range = 1–11)

Living alone (1 = *respondent lives alone*; 0 = *all else*)

Number of friends and family members

Spouse or current partner (1 = *respondent has a spouse or current partner*; 0 = *all else*)

Number of friends (How many friends would you say you have? 0 = *none*, 1 = *1 friend*, 2 = *2–3 friends*, 3 = *4–9 friends*, 4 = *10–20 friends*, and 5 = *more than 20*)

Number of children (sum of respondent's living sons and daughters)

Number of grandchildren (respondent's living grandchildren)

Social participation

Attending religious services (from 0 = *never* to 6 = *several times a week*)

Attending meetings of an organized group (from 1 = *never* to 7 = *several times a week*)

Socializing with friends and relatives (from 1 = *never* to 7 = *several times a week*)

Socializing with neighbors (1 = *hardly ever* to 5 = *daily or almost every day*)

Volunteering (1 = *never* to 7 = *several times a week*)

Social support

How often can you... (1 = *often*, 2 = *some of the time*, and 3 = *hardly ever [or never]*)

Open up to members of your family?

Rely on members of your family?

Open up to your friends?

Rely on your friends?

Open up to your spouse or partner?

Rely on your spouse or partner?

Loneliness

How often do you... (1 = *hardly ever [or never]*, 2 = *some of the time*, and 3 = *often*)

Feel that you lack companionship?

Feel left out?

Feel isolated from others?

LONELINESS

- Loneliness is the subjective assessment that one's social relationships are lacking, perhaps profoundly so. Lonely people feel that they lack companionship, don't have a circle of friends, and often feel left out.
- The constant checking for threats uses up cognitive capacity that could be put to other uses, which may contribute to the increased likelihood of developing Alzheimer's disease faced by lonely people (Wilson et al., 2007). Loneliness is a major source of stress, which puts chronically lonely people at risk of chronic inflammation, hypertension, cardiovascular disease, and stroke. Lonely people sleep more poorly, less often wake up rested, and have more trouble staying asleep. They are at risk for depression, poor executive function, accelerated cognitive decline, and impaired immune function (Hawkley and Capitano, 2015). Loneliness is a candidate for an indicator of poor social health.

Measuring Loneliness

- Since loneliness is a feeling—the perception that one’s social relationships are lacking or inadequate—one can measure loneliness by asking people how they feel. Measures range from a single question, included as part of the CES-D scale: “I felt lonely,” asked about the last 2 weeks or the last month (Payne et al., 2014), with responses ranging from “never” to “often.” A short scale, included in the Health and Retirement Study and in NSHAP, asks respondents how often over the past 2 weeks they have experienced feelings such as “I lacked companionship,” “I felt left out,” or “I felt isolated from others” (Hughes et al., 2004). And the longest version of the scale, the UCLA Loneliness Scale, contains 20 items (Russell et al., 1980). About one person in five is lonely at any given time, with about half of current feelings of loneliness due to situational factors such as a recent move, and about half being hereditary (Hawkley and Capitanio, 2015).

Scale:

INSTRUCTIONS: Indicate how often each of the statements below is descriptive of you.

C indicates "I often feel this way"

S indicates "I sometimes feel this way"

R indicates "I rarely feel this way"

N indicates "I never feel this way"

- | | | | | |
|---|---|---|---|---|
| 1. I am unhappy doing so many things alone | O | S | R | N |
| 2. I have nobody to talk to | O | S | R | N |
| 3. I cannot tolerate being so alone | O | S | R | N |
| 4. I lack companionship | O | S | R | N |
| 5. I feel as if nobody really understands me | O | S | R | N |
| 6. I find myself waiting for people to call or write | O | S | R | N |
| 7. There is no one I can turn to | O | S | R | N |
| 8. I am no longer close to anyone | O | S | R | N |
| 9. My interests and ideas are not shared by those around me | O | S | R | N |
| 10. I feel left out | O | S | R | N |
| 11. I feel completely alone | O | S | R | N |
| 12. I am unable to reach out and communicate with those around me | O | S | R | N |
| 13. My social relationships are superficial | O | S | R | N |
| 14. I feel starved for company | O | S | R | N |
| 15. No one really knows me well | O | S | R | N |
| 16. I feel isolated from others | O | S | R | N |
| 17. I am unhappy being so withdrawn | O | S | R | N |
| 18. It is difficult for me to make friends | O | S | R | N |
| 19. I feel shut out and excluded by others | O | S | R | N |
| 20. People are around me but not with me | O | S | R | N |

SEXUALITY

- Sexuality is an important component of health and well-being throughout the life course. A 2001 report of the U.S. Surgeon General pointed to sexuality as essential to well-being, with calls to attend to sexual health (Office of the Surgeon General, 2001). But serious research consideration of sexual behavior and attitudes, especially among older adults, is relatively recent. Sexuality can be conceptualized as a component of well-being, as a social indicator, and as a predictor or consequence of other dimensions of health (Galinsky and Waite 2014; Liu et al., 2016; Lee et al., 2016; Waite et al., 2009; Galinsky et al., 2014).

Social capital

- Social capital, in this formulation, allows people to have expectations of access to resources from others in the network. These resources include instrumental and emotional help, advice, information, connection to those outside the network, surveillance of behavior within the network, and other products of relationships. Social capital resides strictly within relationships between individuals within the group of which they are members. Some network scholars argue, in contrast, that social capital consists of the flows of resources through networks, not the networks themselves (Lin, 2001).

Social capital

- Social capital theories all point to features of the social networks of individuals as sources of resources and by this means as indicators of social well-being. Social networks can have many different characteristics, ranging from their size to their configuration and their composition (Cornwell et al., 2009). We discuss these below in the section on dimensions of social well-being

SEXUALITY

- Sexuality has been linked to self-rated health, especially of the male partner (Lindau et al., 2007), to marital quality in the face of health decline (Galinsky and Waite, 2014), and to perceived subjective well-being (Lee et al., 2016). Sexual problems have been shown to be more likely among those with poor mental health (Laumann et al., 2008). The study of sexuality at older ages encompasses multiple dimensions. In the section below we concentrate on measures of sexuality primarily because much more work has been done on measurement than on conceptualization.

Measuring Sexuality

- These measures include sexual desire or interest, sexual activity or behavior, sexual functioning, and sexual health (Lee et al., 2016). Sexual desire consists of both proceptive and receptive behaviors and feelings; proceptive sexuality leads a person to seek out a sexual partner, whereas receptive sexuality increases willingness to have sex when asked (Galinsky et al., 2014).

Measuring Sexuality

- Sexual interest has been measured by asking a person any or all of the following questions: how often he or she thinks about sex, whether in the recent past he/she has lacked interest in sex (Schafer et al., 2017), how often he or she masturbates, the importance of sex, sexual activity, and failing to have sex because of lack of interest (Iveniuk and Waite, forthcoming).

Measuring Sexuality

- Sexual attitudes predict partnered sex and sexual interest; those who think about sex more often and those who rate sex as important or very important in their lives have sex more often (Waite et al., 2017).
- Sexual activity includes sex with a partner and masturbation. Especially at older ages it is important to define sexual activity with a partner quite broadly, as the activities that couples engage in shift away from vaginal intercourse toward touching, cuddling, and kissing (Waite et al., 2009), and sexual inactivity among those with a partner increases with age (Lindau et al., 2007). Assessment of sexual activity might include the specific activities that the person engaged in the last time he or she had sex, such as sexual touching or oral sex (Waite et al., 2009).

Measuring Sexuality

- Sexual functioning is generally assessed through a series of questions about whether the person experienced each of a set of symptoms for 3 months or more over the past year. These include pain during sex, lack of interest, lack of pleasure, anxiety about performance, early climax, failure to climax, erectile dysfunction (men), and failure to lubricate (women). Some studies ask the extent to which the problems bothered the person (Waite et al., 2009; Laumann et al., 2008; Lee et al., 2016).

Measuring Sexuality

- Sexual health at older ages is defined by Lee et al. (2016) based on data from ELSA as continued sexual desire, activity, and functioning and is linked to positive subjective well-being with different patterns of these measures for men and women. Older men who have problems with sexual functioning were more likely to have low subjective well-being, whereas for women sexual desire and the frequency of partnered sexual activities predicted positive subjective well-being.

SOCIAL SUPPORT

- The theoretical perspectives outlined above all include mention of social support as a mechanism or pathway through which social capital, social relationships, or social isolation affect health (Berkman et al., 2000). Social support is, quite broadly, any resource that flows between people. These resources can be exchanged within social dyads, such as between spouses or partners, and within social networks or larger social groups such as communities or neighborhoods. Anything that people can exchange can act as a social support resource, but we think most often of instrumental support (such as help with a home repair or picking something up at the store), emotional support, advice or information, financial support, provision of care (such as when one is sick), moral support in a crisis, and social connections to others (such as when a friend calls her sister, the doctor, to ask if she can be seen today for that odd symptom, as a favor to her).

SOCIAL SUPPORT

- The research evidence to date suggests strongly that it is the perception that one has good social support that reduces stress, rather than the actual receipt of support (Thoits, 2011). This makes sense if we think of stress as the perception that one has inadequate resources for the challenges one faces. Knowing one has support is a resource, like money in the bank. It acts as a resource, even if one doesn't need to spend it now. Berkman et al. (2000) pointed to health behaviors, such as smoking and exercise; psychological pathways, such as depression and self-efficacy; and physiological pathways, such as allostatic load and immune function, as examples of pathways through which social support affects health and mortality.

Measuring Social Support

APPENDIX 1. Social Support Scale.

Emotional

2. How much emotional support did you need last month? (e.g., comfort, strength, etc.)
3. How much spiritual support did you need last month? (e.g., prayer, meditations, religious meetings, helps from a religious leader, etc.)
4. How much advice did you need last month? (e.g., family, friends, professionals, religious leaders, other groups, etc.)

Interpersonal

5. How much companionship from other persons did you need last month? (e.g., friends, partner, other persons or groups, etc.)
7. How much did you need to participate in social activities last month? (e.g., parties, movies, sports events, clubs, etc.)

Material

8. How much material support did you need last month? (e.g., money, food, home, transportation, etc.)
9. How much did you need support in performing tasks or working last month? (e.g., home work, school homework, etc.)

Satisfaction

10. Was the social support received sufficient?
11. How satisfied are you with the support received?

SOCIAL STRAIN

- Strains in social dyads are a source of chronic stress and appear more often in relationships that are obligatory, as in the parent-child or sibling relationships. As people have more ability to shed or avoid relationships with a negative component, such as conflict, criticism, or demands, they do so; as a result, their negative relationships become rarer. Divorce or relationship dissolution can rid people of a poor-quality marriage or romantic partnership (Kalmijn and Monden, 2006), one can avoid a sibling or in-law with whom one doesn't get along, and friends are generally retained only if they provide greater benefits than costs (Offer and Fischer, 2017). Recent research suggests that mild strain, such as nagging or criticizing, may be a benefit in some close relationships.

SOCIAL STRAIN

- Warner and Adams (2016) found that for disabled married men, increases in negative marital quality, as indexed by criticism, making too many demands, and getting on one's nerves, reduced loneliness. These relatively mild negatives in the marriage seem to encourage men to persist in social activities that they might give up without the wife's pushing. In a study that asks directly about difficult people in social networks, Offer and Fischer (2017) found that these people tend to be in close and obligatory social roles with the alter, particularly women relatives and aging parents. One could measure good social health by the lack of negative relationships or poor social health by their presence.

Caregiver Burden

- As people age, they face increasing risks of chronic disease, disability (see the chapter by V. Freedman in this volume), cognitive decline, and death. They also often face these challenges in their spouse or partner. Differences by race in the risk of these outcomes and in the age at which they occur have been documented (Umberson, 2017; also see the chapter by Hummer and Gutin in this volume). Poor health, disability, cognitive decline, and other changes with age increase the chances that an older adult will require help with activities of daily living or that his or her spouse or partner will.

Caregiver Burden

- Having a life partner is generally the first line of defense against declines in functioning for older adults, with adult children, especially daughters, next in line as caregivers (Oldenkamp et al., 2016). Some caregivers experience stress, strain, and physical and emotional exhaustion as a result of the demands of care-giving for an older adult. This is especially the case when the caregiver is also old, perhaps with chronic disease or mobility limitations (Oldenkamp et al., 2016). Caregiving may lead to depression, physical stress, and mortality, although results are inconsistent (Fredman et al., 2015). The costs of care-giving for the caregiver may differ by the caregiver's gender, race, ethnicity, and relationship to the care recipient (Jessup et al., 2015), and so these costs are spread unequally across the population (Umberson, 2017). Changes in family relationships across cohorts now entering older ages may result in changes in risks of needing to provide care for others, widening gaps in the burden of care-giving.

During the past week or so, I have...

1. Had trouble keeping my mind on what I was doingYes No
2. Felt that I couldn't leave my relative alone.....Yes No
3. Had difficulty making decisionsYes No
4. Felt completely overwhelmed.....Yes No
5. Felt useful and neededYes No
6. Felt lonelyYes No
7. Been upset that my relative has changed so much from his/her former self.....Yes No
8. Felt a loss of privacy and/or personal timeYes No
9. Been edgy or irritableYes No
10. Had sleep disturbed because of caring for my relativeYes No
11. Had a crying spell(s)Yes No
12. Felt strained between work and family responsibilities.....Yes No
13. Had back painYes No
14. Felt ill (*headaches, stomach problems or common cold*)Yes No

15. Been satisfied with the support my family has given meYes No
16. Found my relative's living situation to be inconvenient or a barrier to careYes No
17. On a scale of 1 to 10, with 1 being "not stressful" to 10 being "extremely stressful," please rate your current level of stress. _____
18. On a scale of 1 to 10, with 1 being "very healthy" to 10 being "very ill," please rate your current health compared to what it was this time last year. _____

Comments:

(Please feel free to comment or provide feedback)

ELDER MISTREATMENT/Abuse

- As people advance in age, they may become vulnerable to abuse, mistreatment, or neglect in a way that they were not earlier in life. Poor physical functioning, cognitive decline, social isolation, and the need for assistance that can follow frailty or functional limitations make older adults more dependent, and can strain close relationships, increasing the risk of physical and financial abuse and neglect (Dong et al., 2011a, 2011b). Financial abuse becomes more likely because cognitive declines may result in older adults having difficulty recognizing deception in others (Wong and Waite, 2017). Mistreatment puts older adults at risk of poor emotional health (Luo and Waite, 2011), injuries, and mortality (Dong et al., 2011b). This makes a report of abuse by an older adult a candidate for measuring poor social health.

SOCIAL ENVIRONMENT

- In the same way that the physical environment affects health, through pollution or safe and pretty places to walk, the social environment can reflect and affect health. As one example, recent research (Cagney et al., 2014) found that older adults who lived in neighborhoods in which the rate of foreclosure was high during the Great Recession were more likely to experience incident depression than those in more stable neighborhoods, regardless of their own financial situation. A relatively new literature has focused on the conditions of the household itself, including the presence of dirt, clutter, smell, poor repair, and noise, which together suggest household disorder (York Cornwell, 2013).

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SOCIAL ENVIRONMENT

- For example, low-income and African American older adults live in more disordered conditions, as do those with poorer physical and mental health. Risk of living in a messy, dirty, noisy household in poor repair is lower for older adults who have a coresident partner, more nonresidential network ties, and more sources of instrumental support (York Cornwell, 2013). At the same time that household disorder reflects a lack of social support, over time it leads to more kin-centered networks and more strain within family relationships (York Cornwell, 2016).

SOCIAL ENVIRONMENT

- Neighborhoods act as part of the local social context in which households and individuals are nested. A healthy neighborhood can be distinguished from one that is less salubrious, with measures of neighborhood characteristics obtained through the perceptions of respondents, observations by field interviewers, and linking to administrative and government data (York Cornwell and Cagney, 2014).

SOCIAL ENVIRONMENT

- Recent research shows that older women report greater neighborhood cohesion and more neighborhood ties than older men, but women also perceive more neighborhood danger. Black and Hispanic older adults reside in neighborhoods with more problems, lower cohesion, fewer social ties, and greater perceived danger. Neighborhood characteristics also vary across residential densities. Neighborhood problems and perceived danger increase with block-level density, but neighborhood social cohesion and social ties were lowest among residents of moderate-density blocks. Neighborhood characteristics have been linked to health conditions including asthma (Cagney and Browning, 2004), health behaviors such as walking (Mendes de Leon et al., 2009), emotional wellbeing (Cagney et al., 2014), and mortality (Browning et al., 2006).

SOCIAL ENVIRONMENT

- It has become well established by recent literature that health and mortality vary dramatically across cities and regions and that the link between social and economic characteristics of individuals and households varies as well. Chetty et al. (2016) found, as others have, that life expectancy differs substantially across local areas, with especially dramatic variations for the poorest individuals. These differences were associated with health behaviors such as smoking and with characteristics of local areas such as expenditures. Although it is clear that where one lives has enormous consequences for health and is a candidate for inclusion in a global measure of social health, the most important characteristics of areas and the mechanisms through which they operate are not well understood.

HOW DO WE MEASURE SOCIAL WELL-BEING?

- Social well-being is an essential component of health, according to WHO, so evaluating it is important. People can be healthy on some dimensions of social health if they perceive them to be good. We could put loneliness in this category; if one feels left out, excluded, or alone, then one is lonely. Relationship quality is similar in this respect; one's marriage is good if one feels that it is. For these dimensions of social well-being, we can just ask each person for her or his evaluation. For other dimensions of social well-being, researchers ask people to describe their social lives and then create measures from those descriptions.

HOW DO WE MEASURE SOCIAL WELL-BEING?

- Social participation is evaluated by asking people how often they attend religious services; go to meetings of community groups; participate in organized groups like bowling leagues; and get together with family, friends, or neighbors. Various measures of social participation can be created from the answers to these questions, depending on the research question being asked. Social isolation is measured, generally, by asking people if they are married or have a romantic partner, who lives in their household, how often they participate in activities with other people, how often they are in contact with family members, and what their social networks are like. If they see lots of people often, they are socially connected. If they see few people infrequently, live alone, and so on, they are socially isolated. Social networks can be measured by asking people about those to whom they are connected. But they could also be measured by counting contacts of some type—for example, social media contacts, cell phone call records, or overlaps in activity space (Browning et al., 2017; Cagney and York Cornwell, 2017).

HOW DO WE MEASURE SOCIAL WELL-BEING?

- New technology has introduced “objective” measurement of some social activities, such as sleep and exercise. Fitness trackers fitted to research subjects can measure various components of sleep, including latency, the time it takes to fall asleep, sleep efficiency measured as the amount of time in bed spent in sleep, sleep duration, and sleep disturbances (Lauderdale et al., 2014). These same activity-tracking devices can measure day-time activity, from sedentary to vigorous (Huisingh-Scheetz et al., 2014). Activity trackers in homes can map location of and contact between residents. Social well-being has long been assessed through vital records, administrative data, and business activity. These sources include Social Security earnings and disability income, employment records, mortality records, Medicare claims data, licenses, and legal proceedings such as those for marriage, adoption, and divorce. Mapping programs allow measurement of features of local areas such as parks and night clubs (Browning et al., 2006). The ability to measure dimensions of social health vastly exceeds existing theoretical perspectives from which to understand their actions and importance.

HOW DO WE MEASURE SOCIAL WELL-BEING?

- **Social Integration**

- 1 You don't feel you belong to anything you'd call a community.
- 2 You feel like you're an important part of your community .
- 3 If you had something to say, you believe people in your community would listen to you
- 4 You feel close to other people in your community (+). 30. You see your community as a source of comfort
- 5 If you had something to say, you don't think your community would take you seriously .
- 6 You believe other people in society value you as a person .
- .7 I don't feel I belong to anything I'd call a community.
- 8 I feel close to other people in my community .
- 9 My community is a source of comfort (+).

HOW DO WE MEASURE SOCIAL WELL-BEING?

- **Social Acceptance**

- 10 You think that other people are unreliable .
- 11 You believe that people are kind .
- 12 You believe that people are self-centered
- 13 You feel that people are not trustworthy
- 14 You think that people live only for themselves
- 15 You believe that people are more and more dishonest these days .
- 16 You think that people care about other people's problems.
- 17 People who do a favor expect nothing in return
- 18 People do not care about other people's problems.
- 19 I believe that people are kind (+).

HOW DO WE MEASURE SOCIAL WELL-BEING?

- **Social Contribution**

- 20 Your behavior has some impact on other people in your community.
- 21 You think you have something valuable to give to the world.
- 22 Your daily activities do not produce anything worthwhile for your community.
- 23 You don't have the time or energy to give anything to your community.
- 24 You think that your work provides an important product for society.
- 25 You feel you have nothing important to contribute to society.
- 26 I have something valuable to give to the world .
- 27 My daily activities do not produce anything worthwhile for my community.
- 28I have nothing important to contribute to society.

HOW DO WE MEASURE SOCIAL WELL-BEING?

- **Social Actualization**

- 29 You believe that society has stopped making progress (-). 8. Society isn't improving for people like you.
- 30 You don't think social institutions like law and government make your life better.
- 31 You see society as continually evolving .
- 32 You think our society is a productive place for people to live in.
- 33 For you there's no such thing as social progress.
- 34 You think the world is becoming a better place for everyone
- 35 The world is becoming a better place for everyone.
- 37 Society has stopped making progress.
- 38 Society isn't improving for people like me.

HOW DO WE MEASURE SOCIAL WELL-BEING?

- **Social Coherence**

- 39 The world is too complex for you.
- 40 Scientists are the only people who can understand how the world works
- 41 You cannot make sense of what's going on in the world .
- 42 Most cultures are so strange that you cannot understand them .
- 43 You think it's worthwhile to understand the world you live in.
- 44 You find it hard to predict what will happen next in society.
- 45 The world is too complex for me
- 46 cannot make sense of what's going on in the world.
- 47 I find it easy to predict what will happen next in society.

Social Actualization

1. Society isn't improving for people like me
2. Society has stopped making progress
3. You don't think social institutions like law and government make your life better

Social Contribution

4. My daily activities do not produce anything worthwhile for my community
5. I have nothing important to contribute to society
6. I have something valuable to give to the world

Social Acceptance

7. People who do a favor expect nothing in return
8. I believe that people are kind
9. People do not care about other people's problems

Social Coherence

10. I find it easy to predict what will happen next in society
11. I cannot make sense of what's going on in the world
12. The world is too complex for me

Social Integration

13. My community is a source of comfort
14. I don't feel I belong to anything I'd call a community
15. I feel close to other people in my community

HOW IS SOCIAL WELL-BEING CONNECTED TO OTHER DIMENSIONS OF HEALTH?

- Berkman et al. (2000, p. 843) developed a comprehensive conceptual model of the mechanisms through which social integration affects health in “. . . cascading causal process beginning with the macro-social to psychobiological processes that are dynamically linked together” Throughout, the authors used “social integration” and “social networks” interchangeably, although I would argue that they are quite distinct dimensions of social well-being.

HOW IS SOCIAL WELL-BEING CONNECTED TO OTHER DIMENSIONS OF HEALTH?

- In this model, the macro-structural forces that affect social integration through social networks include culture, socioeconomic factors, politics, and social change, each with subcomponents. These forces condition the extent, shape, and nature of social networks, which comprise the mezzo level. Berkman et al. focused on social network structure, such as size, density, and range and on characteristics of network ties, such as frequency of contact and intimacy. Here the authors sneak in a measure that many would consider social participation and not a characteristic of a social network. In fact, this measure is described as “frequency of organization participation (attendance)” (Berkman et al., 2000, Fig. 1, p. 847). Simply expanding the mezzo level to encompass “social capital” makes the model more general and more in line with current thinking.

HOW IS SOCIAL WELL-BEING CONNECTED TO OTHER DIMENSIONS OF HEALTH?

- Berkman and colleagues called the next level of their model “psychosocial mechanisms at the micro level.” These mechanisms include social support, social influence, social engagement, person-to-person contact, and access to resources and material goods, all of which affect health through health behaviors and through psychological and physiological pathways. To summarize this elegant model briefly, and to extend and expand it, social well-being affects and is affected by other dimensions of health through access to resources, such as time, advice, care-giving, housing, expertise, and money (York Cornwell and Waite, 2012); through emotional support (Warner and Kelley-Moore, 2012; Warner and Adams, 2016); through stress reduction and management (Thoits, 2011); through shared social environments such as shared social networks (Cornwell, 2012), households (Schafer et al., 2017), and neighborhoods; through physiological processes (Sbarra, 2009) that lead to chronic disease (Liu and Waite, 2014; Liu et al., 2016; Das, 2013); through physiological processes that lead to social outcomes (Das, 2017); through gender display, power, and status (Cornwell and Laumann, 2011; Liu et al., 2016); through mistreatment and discrimination (Wong and Waite, 2017; Das, 2013); and through gene expression (Cole et al., 2015).

FUTURE DIRECTIONS IN SOCIAL WELL-BEING AT OLDER AGES

- The most exciting opportunities to understand social well-being over the next decade or so build on new sources of data, new research questions, new analytic techniques, and new theoretical and conceptual models. Here are some examples.
- Genes and the Social
- Environments and the Social
- Creation of Global Measures of Social Well-being