Should social programs target finances, health, or well-being

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Publication date
2022

Document Version
Final published version

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Amsterdam University of Applied Sciences, Poverty Interventions Group

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This report has been commissioned by Nationale-Nederlanden (NN) as part of their Community Investment Programme NN Future Matters. NN Future Matters aims to empower people in the markets where NN operates to support them in their financial well-being. Their key focus is to foster financial education and empowerment; to create economic opportunities for young people, and to support households that live in challenging financial circumstances.

The manuscript was edited by Marieke Buijs, translated into Dutch by Louise Koopman, and formatted by Suggestie & illusie.

Date
2022

Amsterdam University of Applied Sciences

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1. Introduction

High-income countries have made enormous health gains over the past century and a half. In the Netherlands, life expectancy increased with three years per decade.[1] And more of those years are spent in good health. However, not everyone has benefited from these gains. People from lower socio-economic backgrounds are falling behind, and the gap between them and the rest of society has been widening over the years.[2]

Many of these countries have a vibrant civil society and an abundance of social programs designed to aid those fallen behind. Although a sign of social solidarity, many of these programs demonstrate mixed impacts upon evaluation.[3] One important reason is that they often lack the resources to address problems cohesively, focusing instead on one aspect of the problem they find manageable without paying due regard to connected aspects. Some programs for example offer job application training, but when finding that their clients struggle to pay attention due to lingering financial worries and feelings of depression, they may not know what to do. Should they focus on taking away these worries instead? This begs the question: What should social programs focus on to help those fallen behind?

In recent years, both scientists and the general population gained awareness of the deep entanglement between finances, health, and well-being. People cannot be reduced to a set of problems to be tackled independently, thinking that somehow these solutions add up to solve the problem as a whole.[4] Researchers pay increasing attention to how problems are related, and many lessons have been learned over time. Policy-makers and practitioners who understand the complex relationship between financial, physical, and mental well-being find themselves in the unique position to use these insights in how they design their programs.

This paper provides an overview of academic and grey literature and the lessons we can learn from these studies. Two types of relationships have been most notably studied and are included in this report.

Details on the studies we have drawn upon, as well as our research methodology can be found in the appendix.

The main findings can be summarised into seven key takeaways. These also lay out the structure of the report.

Key takeaways

1 **Health is strongly influenced by a person's socio-economic status (SES), particularly when it comes to mental health.** People with low SES suffer more often from depression and anxiety, are more likely to commit suicide, and also live shorter due to physical illnesses such as diabetes, obesity, as well as cardiovascular disease and cancer. ▶

2 **When trying to improve people's health through uplifting their socio-economic status, policy-makers tend to target education and employment, yet a factor that seems to explain health differences best is the degree of financial hardship a person experiences in their day-to-day life,** such as the severe and chronic stress associated with problematic debts, the inability to serve one's children a healthy meal or the inability to pay rent and provide secure housing, which are all highly damaging to mental health. ▶

3 **People that struggle economically often also struggle mentally, but which one comes first?** A theory that dominated over much of last century argued that a person's socio-economic status is the root cause of possible problems in many other life domains, such as health. In more recent years, researchers have started to learn that the relationship between socio-economic status and health is not one-sided but complex. This has sparked a discourse among researchers, policy-makers, and practitioners to start looking at social problems more holistically, rather than trying to pick them apart and target them in isolation. ▶

4 **The relationship between SES and health follows a person through the life-cycle, uniquely manifesting itself in each phase of life.** It affects how children grow up and how their brain develops, what the schooling years of youth and adolescents look like and whether their lives feel depressing or hopeful during these years. It manifests in the economic opportunities people receive and seize as adults and what their financial lives look like. Across the whole life cycle, the relationship between SES and health is shaped by the type of residential area a person lives in, and whether they find acceptance and belonging from their social environments. ▶

5 **Research on subjective well-being shows that aspects such as income only play a small role comparatively, and that well-being tends to be quite stable over time.** Much bigger factors are non-financial things related to the fulfillment of basic psychological needs, such as personal growth, purpose, health, safety, and belonging. Yet, income does have a backdoor to a person's well-being in that it can influence some of these non-financial factors. One conclusion is to see money as an enabler: a means to an end. Programs can also influence non-financial factors which could greatly boost well-being, but as of yet, this seems harder to do effectively than influencing financial factors. ▶

6 **When a person expects their lives to take a turn for the worse, they can give up trying, which triggers a psychological poverty trap.** The concept of the poverty trap helps us to understand that people are not passive recipients of programs but active agents, yet sometimes they lack the resources and capabilities to help themselves. When social programs find and target these resources and capabilities, they can aid in breaking traps. Although much research is still being carried out in this area, it offers a starting point for social programs by asking such questions as: "What is trapping the people we are trying to help, and what resources and capabilities do they need to help themselves?" ▶

7 **What are the program implications of these findings?** They suggest that complex, multifaceted problems cannot be solved through narrowly-defined problem definitions and singular solutions. Instead, experts increasingly call for adopting a systems approach. This starts by changing the main question. Not 'how can we eradicate poverty,' but 'why does poverty persist?' This leads to a substantially different approach. The final section of this paper explores this approach, which is suggested by experts from around the world as a suitable response to help those fallen behind. ▶

2. What can we learn about the relationship between financial, physical, and mental well-being?

2.1 Socio-economic status (SES) and (mental) health

The idea that a person's health is influenced by their economic life has been studied for over a century, and much has been learned since. The concept most used to study health disparities is socio-economic status (SES), which is an umbrella term for income, education, employment, and other things. In the Netherlands, around 20% of the population experiences far-reaching problems in one or more socio-economic domains.[5] It is too simplistic to state that economic life is only about income, or that poverty is "just a lack of money". It is often a constellation of social and economic challenges. Although every situation is unique, on average, households with low SES struggle more often with issues like an unstable housing situation, a lack of work or structural daytime activities, a lack of schooling, financial insecurity, they might lack a supportive social network, and might not have enough money to cover basic needs. It is not easy to untangle these factors from each other, and in practice, they are highly connected.

Health, especially mental health, is significantly influenced by a person's socio-economic status.[6] Research shows that the link between SES and ill health is stronger for mental health than for general health.[7] Poorer households have increased healthcare use and expenditure[8] and higher admission to psychiatric hospitals[9]. Not everyone is affected by their economic life in the same way. The effects of poverty on mental illness are more pronounced among women[10] (especially during the perinatal period[11]), adolescents[12], and people with chronic diseases such as diabetes[13].

Socio-economic status is linked with common as well as specific, less common mental health disorders. Worldwide, depression and anxiety disorders are the most common mental illnesses, and socio-economic status is linked to both.[14] Poor people are between 1.5 and 3 times more likely than rich people to experience depression or anxiety. But low socio-economic status is also associated with specific, less common mental illnesses, such as psychoses and schizophrenia.[15] Low SES is also linked to earlier death.[16] Death as a result of poverty is often due to ill health but there is also a clear relationship with suicide. The latter is more common among households with high debts.[17]

Socio-economic status is also associated with physical health. People with low SES have greater rates of mortality from cardiovascular disease[18], and cancer[19], worse outcomes in diabetes[20], and higher rates of obesity[21]. The life expectancy of people with low SES is on average five to ten years lower than for people with high SES, depending on the country they reside in.[22] Mental and physical health also coincide: mental illness shows strong comorbidity with chronic illnesses such as diabetes and heart disease.

It is worthy to mention that mental illness influences cognitive functions. Not only mental illness but also poverty directly impedes cognitive functioning.[23] People with cognitive impairments are more at risk of falling into poverty, and research shows that poverty in turn directly lowers someone's intelligence, ability to plan ahead and other important cognitive functions. Parental mental illness can influence children's cognitive development and educational attainment, which is one source of how mental illness and poverty are transmitted across generations.[24]

At a larger level, the place a person lives shapes how the relationship between SES and health plays out in their life. Poorer neighborhoods typically have more pollution, fast-food outlets, and in some countries even targeted ads for tobacco and alcohol use.[25] Yet there is more to it. Being poor within a poor neighborhood seems to be better for a person's mental health than if they are poor within an affluent neighborhood.[26] But this research also suggests that this is only true in poor neighborhoods with higher levels of social cohesion, typically neighborhoods where residents are from minority backgrounds and have historically banded together.

At the national level, a person's economic life affects their health more if a country lacks quality healthcare and social protection such as social benefits and social pensions. Also, countries with greater income inequality have more depression, anxiety, substance abuse, decreased general happiness, decreased child wellbeing, and a higher schizophrenia incidence in adults.[27]

2.2 What really is socio-economic status?

Socio-economic status is a complex and multidimensional construct, and only certain dimensions are strongly linked to health. While research shows the importance of SES, researchers agree that it is a rather vague term. It has come to mean different things to different people and as such there can be disagreement about what findings mean. In practice, SES is used to describe both objective characteristics such as income, education, and occupation, as well as subjective characteristics such as people's ratings of their placement on an imaginary socioeconomic ladder and how challening life feels to them.[28] Much research looks at all these characteristics in aggregate, which makes it hard to unpack what "in" SES explains its relationship with health. However, some studies do unpack SES and zoom in on specific characteristics.

Two characteristics of SES that have received most attention are income and unemployment, yet they do not tell the full story in explaining health differences. Work provides social interactions and a sense of meaning and loss of work and has been found to relate to mental illness and suicide[29]. Income levels have also been found to influence the risk of depression[30] and suicide[31]. Although unemployment and income levels are important factors, they only partially explain the relationship between

SES and health.[32] Furthermore, studies show that other traditional indicators of SES such as education and occupation class are only weakly related to mental health. Instead, it seems other factors explain better why SES can damage health.

When it comes to mental health, the most meaningful aspect of low SES seems to be "financial hardship", which describes the adversity that a person experiences in their day-to-day life due to a lack of economic means relative to their needs.[33] Difficulty in paying bills and rent to provide secure housing, the inability to serve one's children a healthy meal, to buy clothes, pay health insurance and transport costs are examples of financial hardship.[34] Going without meals, seeking assistance from community organizations, and having to pawn or sell possessions have all been associated with depression[35], just as deteriorations in mental health have been associated with the inability to meet housing costs[36] or heat the home[37].

Financial hardship is suggested to explain the relationship between SES and mental health better than any other characteristic.[38] People experiencing financial hardship are at an increased risk of developing mental health problems[39], and hardship may be the factor most predictive of moderate to severe mental disability.[40] Financial hardship is linked to depression[41] and self-harm behaviors[42]. The risk of suicide has also been found to rise in times of economic crisis[43]. One study found that a risk of depression is best predicted by financial hardship compared to any other measure of income and socio-economic status.[44]

One form of financial hardship that seems particularly damaging to mental health is debt, especially the worries and severe, chronic stresses that debt instills. Problematic debt arises when falling behind in loan payments and from the legal consequences that follow from unmet financial obligations.[45] It can also be defined as a lack of possible debt redemption in due time, resulting in a strong cut-back in a household's standard of living.[46] People with debt more often have depression, psychoses and are more likely to commit suicide.[47] Although household debt has been rising over the past decades, crises such as the recent Coronavirus have pushed it up further. In the Netherlands, it is expected that the number of Dutch households being in debt is to rise by almost 1 million in the short run and 41% of these new debts are expected not to be solved without external help.[48] Crucially, research on debt has shown that worry about debt influences depression more than the actual amount of debt.[49] Studies of physical health show a relationship between debt and long-term illness or disability, chronic fatigue, back pain, higher levels of obesity, and worse health-related quality of life.[50]

The effect of debt on health was recently demonstrated by an important study in the Dutch context. The study, conducted by the Netherlands Bureau for Economic Policy Analysis (CPB), observed the year when people were transferred from their private health insurer to the public National Administration Office (CAK), which signals that these people are behind on their health insurance payments.[51] They then compared the health status of these individuals before and after they end up in a problematic debt situation to the health status of individuals without problematic debts. The researchers found that mental healthcare expenditures increased by about 30% for individuals experiencing problematic debts.

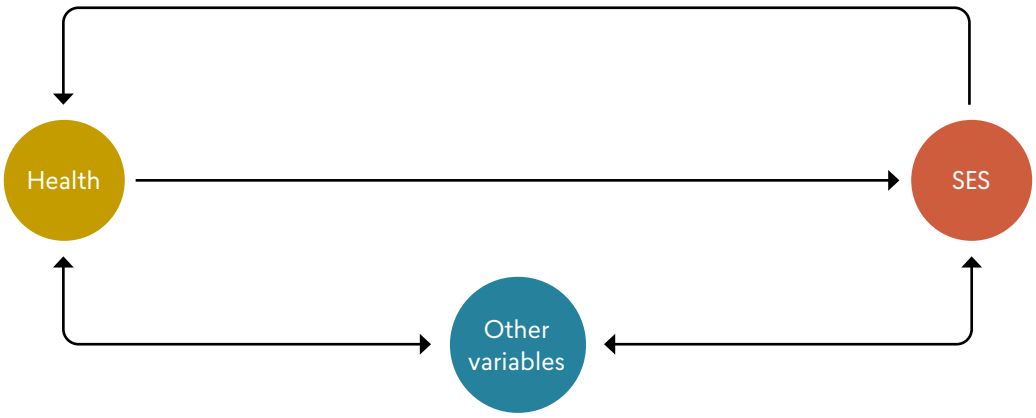
2.3 What is the root of the problem: SES or (mental) health?

People that struggle economically often also struggle mentally, but which one comes first? Researchers call this the question of causality: which causes which. This question of causality has received great attention as it can help answer the question on which side of the equation social programs should focus.

A theory that dominated over much of last century argued that a person's socio-economic status is the root cause of possible problems in many other life domains, such as health.[52] This theory has its origins with researchers questioning the American Dream, which says that social class does not exist, or in the least should not influence the chances a person has to succeed.[53] Researchers found that people living in social housing projects, compared to those in more affluent neighborhoods, were not only poor but also had a whole host of other problems, such as in health, violence and education. This gave rise to the notion of gentrification, hoping that uplifting a neighborhood economically would uplift it in other dimensions too. Over time it became clear that gentrification was too simplistic an approach and had very mixed effects.[54]

In more recent years, researchers have started to learn that the relationship between socio-economic status and health is not one-sided but complex. By complex we mean that the relationship travels both ways and is influenced by a multitude of external variables within larger systems, such as a person's family as well as the neighborhood, community, and country a person is a part of. This has sparked a discourse among researchers, policy-makers, and practitioners to start looking at social problems more holistically, rather than trying to pick them apart and target them in isolation. This is for example done by trying to understand the mechanisms these variables are part of.[55]

FIGURE 1. Depiction of the complex relationship between health and SES.

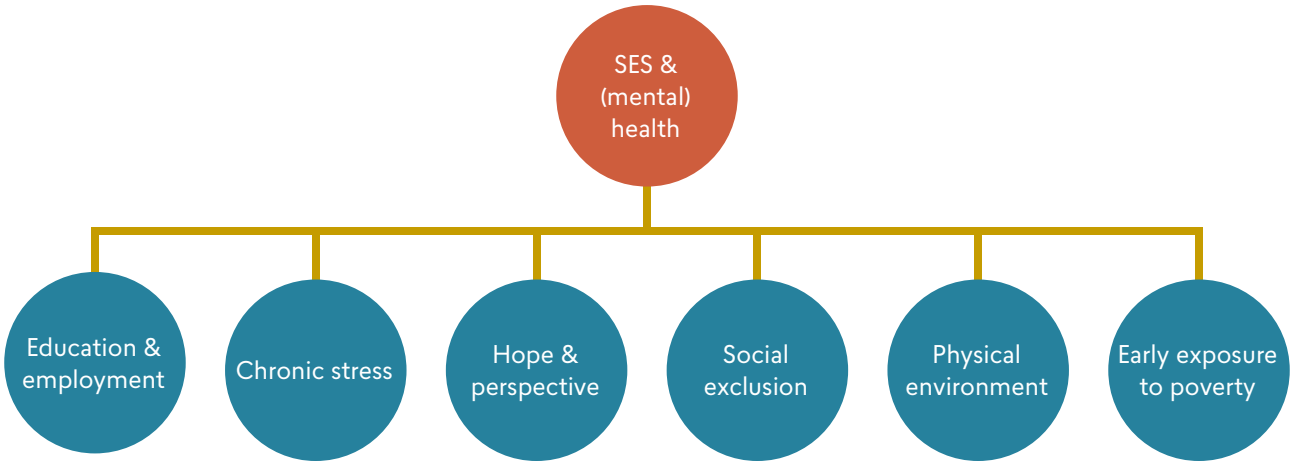


Source: based on Bhattacharya, Hyde, & Tu (2013)

2.4 Mechanisms that link SES and health together

Over the years, researchers have identified several major mechanisms through which SES and (mental) health are linked. Based on the literature, we have identified six. These mechanisms highlight the multi-faceted nature of poverty and deprivation.

FIGURE 2. Six major mechanisms that link SES and (mental) health



Source: Ridley et al. (2020)

A person's life is greatly shaped by the degree to which they can participate fully in the society they live in, with often long-term consequences if someone starts to struggle along the way. Developmental research has shown that common mental illnesses such as depression and anxiety often manifest themselves between adolescence and early twenties.[56] This coincides with secondary and tertiary education and the early stages of a person's work life. The onset of mental illness may thus critically impair a person's economic life, by reducing education completion, worsening early-career job placement, and hindering skill acquisition.[57] For those that can work, depression can have a direct effect on productivity due to a lack of concentration and increased fatigue. Depressed individuals may therefore work fewer and shorter days.[58] Depressed workers may also be more easily discouraged during job searches or when facing setbacks at work. All these results suggest that there is much potential by investing in the mental health of adolescents and young adults. Research finds that treatment of mental illnesses can successfully help people to find employment.[59]

People can experience extreme uncertainty and financial volatility, which over time influences how their bodies behave. Research shows that it is the anticipation of financial hardship, not just its actual occurrence, that causes mental illness. Receiving unexpected letters on late payments, unannounced visits from collection agencies, these can all be greatly stressful experiences. But it is not just sudden events that are stressful. In trying to make ends meet – covering basic needs just as food, rent, heating – poor families are often forced to prioritize and make hard choices.[60] When these circumstances do not go away, the stress it induces gradually alters a person's biological functioning. In normal circumstances, the human body

can return to low-stress homeostasis after stressful events. People who experience chronic stress do not return to such homeostasis and their body keeps producing stress, with significant negative health consequences over time.[61] Sustained exposure to stress from managing uncertainty can also threaten mental health.[62] But research has also shown targeting uncertainty and financial volatility can have substantial health benefits. This can be done by providing insurances and debt relief. One study gave low-income individuals in Oregon, USA free health insurance worth up to $750 per year, finding that depression rates dropped significantly within a few months.[63]

Hope & perspective

People consciously and unconsciously evaluate the prospects of their futures, which can create a downward spiral when they experience a lack of perspective. In recent years, increasing attention is given to understanding motivation and agency in people to change their own lives. Even a currently positive situation is hard to bear when we know the future will be grim.[64] This influences how people make choices. Research shows that people in poverty often have real opportunities to improve their lives – for example by saving on energy costs in the house or following a training at work which enables a promotion – but often choose not to take up on these opportunities.[65] This stems from a so-called "cognitive dissonance" between caring for one's future and fearing that this future will never come.[66] This dissonance is itself a source of ongoing stress. Therefore, people may lower their aspirations – their hope or ambition of achieving something – to resolve the dissonance. The link between hopelessness and depression has long been established.[67] Whereas mentally healthy individuals tend to protect overly optimistic beliefs about themselves by ignoring negative information[68], depressed individuals update their beliefs more pessimistically.[69] In situations where people see no possibilities to improve their situation, they may lower their aspirations and dreams to limit their feelings of despair. In contrast, when programs help people to see pathways towards their goals, they can become much more future-oriented.[70] Studies find that programs aimed at raising hope and aspirations can unlock motivation and agency.[71]

Social exclusion

People can experience social exclusion by feeling poor in the eyes of others. Some research suggests that more than about being poor, poverty is about feeling poor. Relative poverty is about how well-off a person is compared to others in one's society, and may play an important role in the relationship between poverty and mental illness.[72] Feeling poor comes with feelings of shame and being stigmatized. In one interesting study, Norwegian tax records were posted online, making citizens' income easily searchable.[73] Researchers observed that this opportunity to compare one's income to others caused the gap in reported well-being between the rich and poor within Norway to widen considerably. Social exclusion of people living in poverty may also result in isolation and loneliness[74], which in themselves are shown to be strongly linked to depression.[75]

Physical environment

Poverty often manifests in a person's physical environment, such as their housing conditions. They might suffer from mold, bad isolation which leads to both cold and heat as well as noise pollution from surroundings. Noise pollution has also been linked to lack of sleep, which in turn has been linked to mental illness.[76] Days of extreme heat see worse self-reported mental health and increased rates of self-harm and suicide.[77] Health can thus be influenced by where a person lives. One study in the

United States found that low-income households that were paid to move to more affluent neighborhoods had less depression and anxiety afterward, despite having the same income as before.[78]

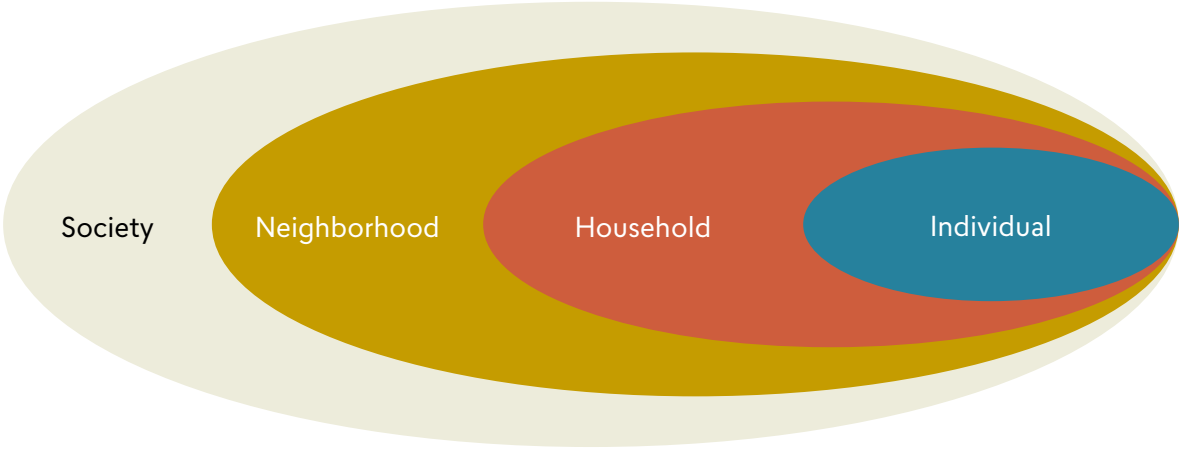
Early exposure to poverty

Exposure to poverty in early life can threaten mental health in later years. The influence of poverty on a person can already start before birth, if during pregnancy the mother is exposed to malnutrition or stress. One study shows that the death of a mother's relative during pregnancy (compared with after childbirth) predicts depression and anxiety among her grown children later in life.[79] Poverty may also expose children much more to adverse shocks, such as periods of hunger and illness. Due to the plasticity of the brain at a young age, such shocks can profoundly affect brain development, cognitive ability, and mental health in adolescence and adulthood.[80] These results imply that programs providing financial support for households with pregnant women or young children may have high long-run mental health and economic consequenes.

FIGURE 3. The relation between SES and health expresses itself across the whole lifecylce

Source: UNICEF (n.d.)

FIGURE 4. The relation between SES and health expresses itself in different contexts



Source: Bronfenbrenner (1979)

2.5 Income and subjective well-being

Researchers have also long been interested to see how well-being relates to a person's financial life, and income seems to influence particularly how a person thinks about themselves and their lives. Well-being is a large and somewhat intangible concept and most research focuses on subjective well-being: asking how a person reflects on their own life. Subjective well-being deals with both our emotional experiences: joy, stress, sadness, anger, affection, and with the way we think about our lives, the sense of purpose we believe our lives have, the degree to which we feel like we belong and have a sense of identity. Our emotional life seems to be most influenced by things such as our health and whether we feel lonely or connected, and much less influenced by income. In contrast, the way we think about ourselves and our lives is more commonly influenced by income, but also things such as our education and our work.[81]

Yet research also shows that things such as income only play a small role comparatively, and that well-being tends to be quite stable over time. Subjective well-being can fluctuate, for example due to life events such as starting a new job, a change in relationship status or the loss of a loved one. But humans are also incredibly resilient and able to adapt, causing them to shift back to their "baseline" level of well-being as time goes by. A study among lottery winners showed that whilst the winners had higher well-being immediately after their win, eventually their well-being was similar as compared to before their win.[82] One explanation is that well-being has a large genetic component, it is around 80% determined by heritability.[83]

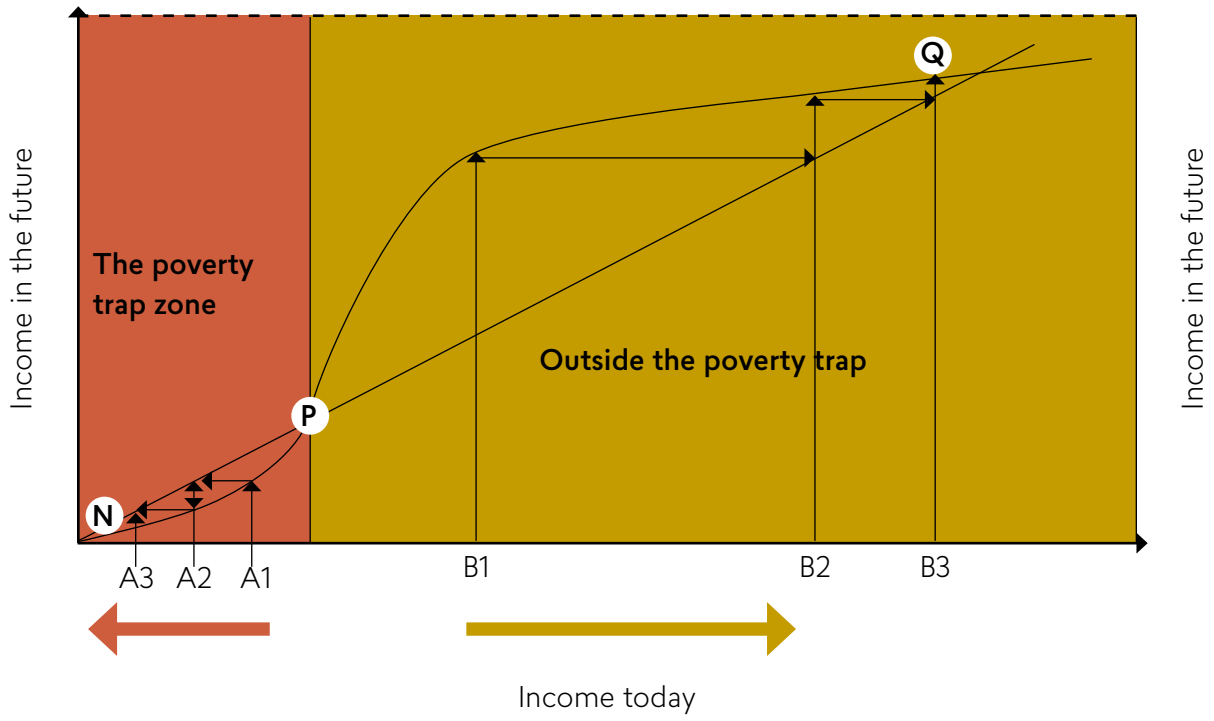
The most important things that seem to influence well-being are non-financial, such as the fulfillment of basic psychological needs: personal growth, purpose, health, safety, and belonging.[84] One way in which income can influence well-being is through these factors, for example when income influences a person's social status and sense of belonging. Income places someone on an income ladder compared to others: people do not like to be lower on the ladder. Researchers refer to this as the "relative income" model. For example, employees who learn that their salaries are at the low-end compared to colleagues, experience lower well-being. In other words, as we saw earlier, feeling poor is particularly damaging to well-being.[85] Interestingly, it appears that the relative income model mostly works one way: being poorer than one's peer makes unhappier, but being richer does not make happier.[86]

One conclusion from the well-being literature is to see money is an enabler: a means to an end. But so can be other things as well that in theory don't cost anything: purpose, identity, and belonging to name a few. The problem is that these things cannot be transferred by a program to a person as easily as money. How can you give a person a sense of purpose, for example? How can you give a person a sense of belonging? Many social programs that do try such things, for example by offering confidence training, turn out to have mixed or at most relatively small results in the long-run. Especially when these programs are expensive, it can raise questions about whether the money is well spent. It is for this reason that policy-makers and practitioners are increasingly sympathizing with the idea of cash transfers and a basic income because it helps people efficiently and transparently. Yet, this does not discount that non-financial factors can be influenced directly and create powerful effects on well-being. This is where much research at the moment is being directed, for example by studying poverty traps.

2.6 Psychological poverty traps

One concept has gathered increasing attention over the years, which is the poverty trap. To understand the poverty trap, imagine the relationship between a person's income today and their income in the future. The future could be tomorrow, next month, or even the next generation. The more a person can invest in the future – by saving, by getting a degree or a job training, by learning new skills – the higher will be their income in the future. Investing in the future is the primary way to get out of poverty, or to climb in socio-economic status. Figure 5 illustrates the relationship between income today and in the future. To read the graph, first look at the diagonal line: this is where income today and income in the future is the same. 1500 euros today becomes 1500 euros in the future. The key lies in the shape of the curve. As long as the shape is *above* the diagonal line (B1), income will be higher in the future. Over time the person becomes richer and richer, moving from B1 to B2 and B3 until they reach a stable point of income (Q). This is outside the poverty trap zone. In contrast, when the curve is *below* the diagonal line, a person becomes poorer and poorer, moving from A1 to A2 and A3 until they are stuck (N). This is the poverty trap zone.

FIGURE 5. The S-Shape Curve and the Poverty Trap



Source: Banerjee & Duflo (2011)

When a person expects their lives to take a turn for the worse, they can give up trying, which triggers a psychological poverty trap. This is where mental health and well-being come into the picture. As we read earlier, being poor is a source of mental illness. Yet, being mentally ill causes us to see the world more pessimistically and behave in a way hat can keep us poor. In other words, it is not poverty or mental health separately that is the main problem, but their relationship that can cause a person to become trapped. To break the cycle, the relationship has to be broken. This can happen if a person's income changes significantly enough to cause the person to start having a different outlook mentally. But if the change is not substantial enough, it may not be sufficiently powerful to break the trap. It is too simplistic to just focus on people gaining self-confidence when their reality suggests the opposite.

The psychological poverty trap helps us understand that people are not passive recipients of programs, but are driven by hopes and aspirations and actively seek to shape and improve their lives.[87] However, when people lack the capabilities to help themselves and to influence the world around them – when people are trapped – they can "switch off" and instead focus on making the most of today. This mechanism can serve as justification to offer help from outside as a person cannot help themselves anymore.[88] It also helps to explain that not all poor people are the same: some are switched on and some are switched off. For the second group, an intervention is needed that creates a dramatic improvement in their economic situation.[89]

The poverty trap can offer a starting point for social programs by asking such questions as: "What is trapping the people we are trying to help, and what capabilities or other means do they need to help themselves?" Of particular interest are psychological interventions that can unlock people's motivation and agency to improve their own lives.[90] Much research is currently focused on what might be needed to break such traps, and we expect new insights to arise in the coming years.

3. How can we address the complex relationship between finances, health, and well-being?

Understanding of the complex relationship between finances, health, and well-being has fueled a discourse among researchers, policy-makers and practitioners in the field on how it can be addressed. It shows, for example, that poverty is more than a lack of money. Rather, finance, health, and well-being are all part of what makes and keeps people in poverty. The problem is that ineffective programs often follow from an incomplete definition of poverty. For example, merely understood as falling below an income or expenditure threshold, it can create a focus on merely offering goods and services to the poor, failing to address their mental health situation, the contexts they live in, as well as their hopes and aspirations.

One step in the right direction is that governments and organizations increasingly use tools such as design thinking to create and improve their programs.[91] Although this is not the place to explain these tools elaborately, the gist is that they change the main question asked. Instead of asking "How can we eradicate poverty?", they start by asking 'Why does poverty persist?'. The first question leads naturally and logically to solutions like ensuring that poor people have access to government services such as social benefits and employment programs. But are these solutions designed to address symptoms or causes? If you ask the more fundamental question, you will come up with a more fundamental answer. To start, you won't focus your initial inquiry on describing every facet of the problem you see in front of you today – people that lack a diploma, people not using government services, people with functional illiteracy, etc. – but rather on the causes and conditions from which the overall reality emerged. For example, research in the Netherlands shows that many people find government services complex, distrusting, and paternalistic, and that for these reasons people can be highly motivated to not seek help from them.[92] An important conclusion we can reach from the above is that social programs should contribute, no matter how modestly, to the transformation of structures that keep people poor – mental, institutional, and cultural.

Another insight this body of research has sparked is that socio-economic and health improvements have been determined more by collective efforts than individuals' lifestyle choices and decision-making. Up till the 80s of the last century, social programs in many Western countries tended to have a more collective and large-scale orientation.[93] Large health and life expectancy leaps were made when societies improved their urban hygiene through sewers, waste disposal, sanitation and

provision of fresh drinking water, and created a social safety net through welfare programs and universal healthcare. During the 1980s, a notable shift happened when social programs started focusing more on the individual, their knowledge, behaviors and decision-making. However, these programs mostly benefited those that are not behind, and over the past four decades, health disparities widened despite goals and efforts to do the opposite.

With these insights in mind, experts increasingly call for a systems approach. This way of working is sometimes branded as "collective impact", and is being promoted by an increasing number of experts around the world.[94] A systems approach requires a diversity of initiatives coming together under the umbrella of a common agenda. This common agenda builds common ground and a common purpose towards which all social programs contribute. This helps to move beyond a reality of loose bundles of "isolated impact" that in their totality behave erratic and self-canceling. This does not mean that all programs need to do the same. In contrast, each undertakes a set of activities they excel in that strengthens and is being strengthened by other programs. This creates a systems approach of mutually reinforcing activities.

Taking a systems approach is in most places still in its infancy, yet several examples exist that can be learned from. At the global level, the United Nations is promoting a common agenda through the Sustainable Development Goals (SDGs). Research shows that adopting such an international agenda has accelerated poverty reduction worldwide.[95] At the local level, this way of working is still new, yet there are some examples. In the Dutch city of Rotterdam, a sense of urgency was felt some ten years ago regarding the state of several neighborhoods in the south side of the city. Insiders emphasized the erratic nature of the totality of projects that aimed to uplift the neighborhoods. From within the municipality, an independent platform was created called Nationaal Programma Rotterdam Zuid (National Program Rotterdam South, NPRZ).[96] Its purpose is to improve a range of social outcomes through deep collaboration between many public, private and civic stakeholders, ranging from housing corporations and healthcare institutions to school boards and local businesses. Because the program works within a defined geographic area, collaboration finds natural expression and in a more bottom-up manner. Crucially, because the program length is relatively long-term (20 years), evaluation and learning is not done only at the end. Instead, every few years efforts are made to take stock of progress and lessons learned. Teething problems which so often frustrate practitioners and implementers are subsequently ironed out, and there is an overall iterative improvement in implementation over time.

A systems approach has no formula, but it helps to start simple. Choose a geographic area of focus, see what the reality of the area is, and where change needs to happen. The desire for change serves as a rallying call that brings relevant parties together. Together they express a mutual commitment to cooperate towards the common goal. Details make a difference: Don't make your plans too grandiose, don't try to control, let initiative and experimentation be rewarded. Select conveners and coordinators based on motivation, not based on function or title. Give people with lived experience a voice. Let high-level stakeholders such as municipalities, social funds or large foundations hold back and be equal partners. This pays dividends in creating a collective atmosphere. And don't be afraid of disagreements and hassles, but don't let these take your eyes off the ball. Take time for this process to take shape, as it will create momentum and foster efficiency later. Next, see who is best equipped to do what and evaluate collectively what happens when steps are being taken. By being in continuous contact, every party is heard and kept on board. Gradually, sub-goals are identified and tasks clarified. The strength lies in learning and adapting, constantly in light of the overarching goal.

Endnotes

1 Bussemaker, 'S Jongens, Vonk, Willemsen, & Van der Zwaard (2020)
2 SCP (2021)
3 Ibrahim & Hulme (2010)
4 Gerrits (2012)
5 SCP (2021)
6 Richardson, Elliot, & Roberts (2013)
7 Mangalore, Knapp & Jenkins (2007)
8 Roos, Diepstraten, & Douven (2021)
9 Koppel & McGuffin (1999)
10 Lund et al. (2011)
11 Gelaye, Rondon, Araya & Williams (2016).
12 Quon & McGrath (2014)
13 Leone et al. (2012)
14 Ridley et al. (2020); Lorant et al. (2003)
15 Harrison et al. (2001)
16 Bosma, Schrijver, & Mackenbach (1999); Mackenbach et al. (2008)
17 Richardson et al. (2013)
18 Lee & Carrington (2008)
19 Quaglia, Lillini, Mamo, Ivaldi, & Vercelli (2013)
20 Grintsova, Maier, & Mielck (2014)
21 El-Sayed, Scarborough, & Galea (2012)
22 OECD & EU (2020)
23 Mani, Mullainathan, Shafir, & Zhao (2013)
24 Ridley et al. (2020)
25 Treuhaft & Karpyn (2015)
26 Wickrama, Noh, & Bryant (2005)
27 Bouffard & Dube (2013); Pickett, James, & Wilkinson (2006)
28 Navarro-Carillo, Alonso-Ferres, Moya, & Valor-Segura (2020)
29 Almasi et al. (2009); Amoran, Lawoyin, & Oni (2005); Andersen, Thielen, Nygaard, & Diderichsen (2009); Corcoran & Arensman (2011); Viinamäki, Kontula, Niskanen, & Koskela (2000); Qin, Agerbo, & Mortensen (2003)
30 Qin et al. (2003)
31 Andersen et al. (2009); Wang, Schmitz, & Dewa (2010)
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33 Mack & Lansley (1985)
34 Frankham, Richardson, & Maguire (2020); Lewis et al. (1998); Lorant et al. (2007); Mirowsky & Ross (1999)
35 Butterworth, Olesen, & Leach (2012)
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48 Fd. (2020)

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54 Smith et al. (2020)
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56 Kessler et al. (2007)
57 Patton et al. (2016)
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59 Lund et al. (2019)
60 Ridley et al. (2020)
61 Hosper & Van Loenen (2021)
62 Staufenbiel, Penninx, Spijker, & Elzinga (2013)
63 Finkelstein et al. (2012)
64 Pleeging, Burger, & Van Exel (2021)
65 Banerjee & Duflo (2007)
66 Laajaj (2014); Duflo (2012)
67 Nekanda-Trepka, Bishop, & Blackburn (1983)
68 Eil & Rao (2011)
69 Korn, Sharot, Walter, Heekeren, & Dolan (2014)
70 Pleeging & Burger (2020)
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78 Ludwig et al. (2012)
79 Persson, & Rossin-Slater (2018)
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81 Kahneman & Deaton (2010)
82 Brickman, Coates, & Janoff-Bulman (1978)
83 Lykken & Tellegen (1996)
84 Ryan & Deci (2012); Ryan (2009); Aknin, Norton, & Dunn (2009); Sandel (2012)
85 Kolbert (2018)
86 Kolbert (2018)
87 Deci & Ryan (2012)
88 Sen (1999)
89 Haushofer (2019)
90 Haushofer, Mudida, & Shapiro (2020)
91 Kirk, Hickel, & Brewer (2015); Schaminée & Dorst (2021)
92 Netherlands Scientific Council for Government Policy (2019); Van den Berg et al. (2020)
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Appendix: Methodology

The purpose of this systematic review study is to summarize the state-of-the-art evidence-base. In recent years, a number of important summary analyses have been carried out – known as meta-analysis studies and systematic reviews. This report provides an overview of the results, drawing from these studies. We have drawn as much as possible from high-quality summary studies that have been published in top journals in the past five years. When possible we draw from empirical studies that establish causation rather than correlation–meaning that they do not just look at whether two things co-exist, but whether one comes before the other.

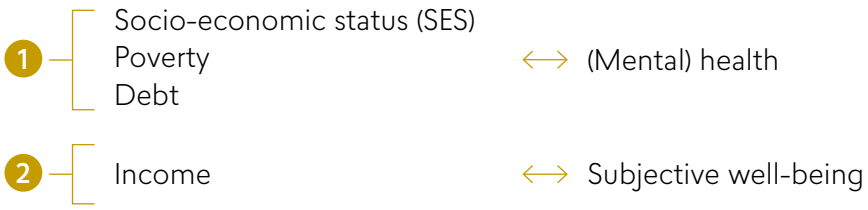
A systematic review is "a study of studies". It takes a large volume of loose studies on a similar theme and ties them together, seeing what story emerges. Here it is helpful to say a few words about the different types of studies that are carried out. We are not the first to conduct a review study on this theme. Rather, we are fortunate to see that at the time of compiling this report, several review studies have been carried – some of which very recently. By drawing on these studies, a lot of groundwork is already covered. Furthermore, studies can roughly be grouped into those that look at relationships between two variables (correlation) and those in which one variable predicts or causes another (causation). The "best" studies are able to find a causal effect, for example by randomly assigning people to a treatment group and others to a control group. Economic research is often focused on uncovering causality. Finally, some studies look at a third variable to help explain a relationship. These studies try to uncover mechanisms. Psychological research is often focused on uncovering mechanisms. In this report, we draw upon both economic and psychological literature.

This systematic literature review study consisted of three phases.

1) Mapping of studies
2) Analysis and synthesis of findings from studies
3) Reporting findings

The first phase consisted of identifying search terms for the topics. The intial search strategy is described in Table 1. Here meta-analysis studies and systematic review studies were identified that served as basis. These were then supplemented with relevant individual empirical studies. Because Dutch studies are generally underrepresented in meta-analyses, emphasis was placed on identifying relevant individual studies. Individual studies were also found using a so-called snowball method – by screening references from relevant studies.

This resulted in the inclusion of some 77 studies. Furthermore, 10 of these studies were meta-analysis and systematic review studies. The search terms that led to the most results were well-being, (mental) health, poverty, socio-economic status, and income. Also, not all relationships are explored. Often, researchers focus on particular relationships and try to build onto each other to gradually unpack them over time. As a result and in this context, two types of relationships have been most notably studied:



Research on the second relationship is much older than the first. This is reflected in the amount of research that has been conducted on it and the depth to which it has been explored. Below we list the most important studies we used to draw up this review.

There are two prominent reviews on the link between poverty and (mental) health:

1. Ridley, Rao, Schilbach, and Patel (2020). Poverty, depression, and anxiety. Causal evidence and mechanisms. Published in *Science*.
2. Richardson, Elliot, and Roberts (2013). The relationship between personal unsecured debt and mental and physical health: A systematic review and meta-analysis. Published in *Clinical Psychology Review*.

There is one review on the link between income and subjective well-being:

3. Tay, Zyphur, and Batz (2018). Income and subjective well-being: Review, synthesis, and future research. Published in *Handbook of well-being*.

Besides these, there are several other reviews worthy of mention:

4. Frankham, Richardson, and Maguire (2020). Psychological factors associated with financial hardship and mental health: A systematic review. Published in *Clinical Psychology Review*.
5. Patel, Burns, Dhingra, Tarver, Kohrt, and Lund (2018). In Income inequality and depression: a systematic review and meta-analysis of the association and a scoping review of mechanisms. Published in *World Psychiatry*.
6. Lund, Brooke-Sumner, Baingana, Claire Baron, Brever, Chandra, Haushofer et al. (2018). Social determinants of mental disorders and the Sustainable Development Goals: a systematic review of reviews. Published in *The Lancet*.
7. Haushofer and Fehr (2014). On the psychology of poverty. Published in Science.
8. Turunen and Hiilamo (2014). Health effects of indebtedness: a systematic review. Published in *BMC public health*.
9. Bhattacharya (2013). Socioeconomic disparities in health. Chapter 4 of the handbook *Health Economics*.
10. Lund, De Silva, Plagerson, Cooper, Chishold, Das, Knapp, and Patel (2011). Poverty and mental disorders: breaking the cycle in low-income and middle-income countries. Published in *The Lancet*.

Several Dutch publications were used to include the context of the Netherlands, among which:

11. Roos, Diepstraten, and Douven (2021). When financials get tough, life gets rough? Problematic debts and ill health. *Published by CPB Netherlands Bureau for Economic Policy Analysis.*
12. Bussemaker, J., 'S Jongens, T., Vonk, R., Willemsen, C., & Van der Zwaard, W. (2020). Beyond health disparities: Complex inequality is the business of us all. Published by *Netherlands Council for Public Health and Society.*

Beyond the aforementioned, there are dozens of individual studies which have contributed significantly to thought and understanding. With some exceptions, all these studies are included in these review studies.

TABLE 1. Initial search strategy

Financial well-being	**Normative concepts**
	Financial literacy
	Financial self-sufficiency
	Financial resilience
	Empirical concepts
	Poverty
	Objective poverty
	Subjective poverty
	Problematic debts
	Social economic status
Physical and mental well-being	**Normative concepts**
	Well-being
	Empirical concepts
	Subjective well-being
	Physical health
	Physical functioning
	Mental health
	Quality of life
	Depression
	Stress
	Disorders
	Loneliness
	Social isolation

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