

# Relationship between socioeconomic status and intelligence



Socioeconomic status is strongly associated with intelligence. Discuss the possible reasons for this relationship, and indicate which you think is the strongest explanation.

Socioeconomic status (SES) is the social standing of an individual, or a group in society, and is often measured using educational attainment, occupation and income (*Hoff-Ginsberf & Tardif, 1995*). Intelligence is a subjective concept, and problems arise when attempting to define it (*Sternberg & Grigorenko, 2004*). *Thorndike (1936)* suggested that intelligence consisted of social, mechanical and abstract elements, and that it is not sufficient to simply use the traditional measurement of IQ.

Studies have found that socioeconomic status ' modifies the heritability' of intelligence (*Hanscombe et al, 2012*). For example, *Bradley & Corwyn (2002)* found that children from disadvantaged family backgrounds scored lower on intelligence tests in comparison to their peers of high SES. This was followed up by *Feinstein (2003)* who found that their performance worsened over time, even if they had performed strongly in early assessment. This highlights the importance of environmental influences on intelligence. As the title indicates, an association between the two variables has been found. This essay will explore the possible reasons for the relationship.

One possible explanation for this association between SES and intelligence could be parental influences. Amongst numerous other reasons, this could be due to the fact parents in wealthier conditions, converse with their children in a different manner compared to those in disadvantaged conditions. For example, *Bradley & Corwyn (2002)* found that they use a ' richer vocabulary'

and ask, ' more conversation-eliciting questions'. There are three reasons for this.

Firstly, adults in a higher socioeconomic environment may have differing opinions about the appropriateness of talking to children, and hold different beliefs about their child's ability to communicate (*Heath, 1983*). *Hoff-Ginsberg (1983)* found that mothers from a high socioeconomic background sustain conversation for a longer period of time. Consequently, this means that their children hear more speech overall. As a result, they may learn more vocabulary and this could improve their language ability in the long term (*Longo, McPherran Lombardi & Dearing, 1983*).

Secondly, their occupation dictates the amount of time that they have to spend with their children and this could influence interaction. One major difference between low and high SES conditions is the free time available for ' leisurely conversation'. Parents from lower SES conditions have to spend their time performing more goal-orientated activities, and do not necessarily have time for book reading or toy playing( *Snow, Perlmann & Nathan, 1987*).

Lastly, parental education level could influence the way children are addressed. It's suggested that those in higher SES situations use a different style of language, and *Hoff- Ginsberg (1994)* found that these styles manifest in all conversations, regardless of the addressee. Exposure to a varied and intellectual standard of vocabulary has been found to be beneficial for language development (*Longo, McPherran Lombardi & Dearing, 1983*).

Research has also illustrated that parental education achievement is strongly associated with a child's behaviour (*Davis-Kean, 2005*). This correlation <https://assignbuster.com/relationship-between-socioeconomic-status-and-intelligence/>

between educational level and behaviour is interesting, as it highlights how parental education level can indirectly influence one's intelligence. For example, if a child were to have behavioural problems, this could be disruptive to their education- they may be sent out or put in lower classes due to a lack of concentration. This hinders their ability to reach their full academic potential.

Another way this correlation could be interpreted is based on the social learning theory framework ( *Bandura, 1978* ). Individuals with high SES will have a highly respected job, and is likely to have achieved a high level of academic attainment. It is also likely they will have gained these things through hard work and 'impressive performance' (*Putranto, Nuraeni, Gustomo & Ghazali, 2018*). *Bandura (1978)* suggests that individual's behaviour stems from observational learning of their surrounding environment. Therefore, behaviour performed by children is often based on how their parents behave. Their parents are identified as their 'role models' and are then imitated accordingly. Specifically, therefore, if one's parents were to have a strong work ethic, the child is more likely to act in a similar way. Consequently, this strong work ethic increases the likelihood the child will fulfil their full academic potential. As a result, they may perform better in exams, and in the long term become more intelligent.

Another way parental characteristics can mediate the relationship between intelligence and SES, is through their parent/child relationship. Parents of lower SES may have less time to spend bonding with their children. This could be a consequence of the family-effect size (*Booth & Key, 2009*), or something as simple as having to work longer hours to make ends meet. This <https://assignbuster.com/relationship-between-socioeconomic-status-and-intelligence/>

could lead to formation of an unstable internal working model based on an insecure relationship with the primary care-giver (*Bowlby, 1969*). *Jensen (2009)* suggested that stronger relationships can stabilize behaviour, and provide the guidance needed to build appropriate skills. This could explain why a major long-term consequence of maternal deprivation is reduced intelligence (*Bowlby, 1969*).

Research has illustrated that SES is a strong predictor of both physical and psychological health ( *Hoff-Ginsberf & Tardif, 1995*). It has been found that poor SES conditions are associated with unhealthy behaviours, such as ‘ alcohol use, smoking and inadequate physical activity’ (*Hazzouri et al, 2017*). Evidence has also suggested that there is a positive correlation between healthy behaviours and intelligence (*Deary, 2008*).

From this, I’d suggest that health is the link between SES and intelligence. Health is influential in numerous ways. For example, an adult with a lower IQ is likely to be of lesser health than their more intelligent counterpart. (*Deary, 2008*) Consequently, they may become ill more often and take more health-related absences from work. More directly, *Wynne-Jones (2009)* found that poor health is one of the greatest impacts on work performance. Poor performance in the workplace hinders promotion opportunity, and in extreme cases could result in unemployment (*Putranto, Nuraeni, Gustomo & Ghazali, 2018*). Thus, poor health results in difficulty changing individual socioeconomic circumstances.

Health is also influential at a childhood level. Research has indicated that parental SES is negatively correlated with the number of diseases

experienced throughout childhood (*Szumi, Firkowska-Mankiewicz, Lebuda & Karwowski, 2018*). Arguably, poor health can result in an increase of health-related absences from school or a decline in productivity whilst there. This inhibits intelligence progression as supported by (*Ceci, 1990*), who found that regular school attendance was associated with higher IQ.

From this we can infer that parents of higher intelligence are less likely to engage in the behaviours that are considered 'unhealthy'. Not only are they less likely to engage in them, but research has found that they are more likely to actively discourage their children from engaging in them also (*Murray, Kiryluk & Swan, 1985*). Consequently, the child's intelligence is less likely to be affected by the unhealthy behaviours.

Health is also an important factor at the prenatal level. As previously mentioned, SES is a strong predictor of engagement in certain behaviours. Intelligence has also been found to be associated with particular behaviours. For example, research has shown that lower intelligence is associated with maternal smoking (*Mortensen et al, 2005*) and with foetal alcohol syndrome (*Kodituwakku et al, 1995*). From this, we can infer that children who're born into families of a low socioeconomic status, develop at a slower physical rate than those in different circumstances. *Deary (2008)* found that birth weight was positively correlated with intelligence, suggesting that physical development can influence intelligence in the long term.

Infants aren't independent, they rely on other people in order to survive and need to be fed and cared for by their parents. Consequently, their infant behaviour is completely determined by this care- they have very little

contribution to their wellbeing. Differences in intelligence based on SES have been detected from as early as two years old (*Stumm & Plomin, 2015*). As infants have very little dictation over factors concerning their health, it is likely that their parents are the root of the issue at this stage.

When discussing health, it is important to consider the effects of mental health as well as physical health. Research has indicated that children from low socioeconomic status communities develop academic skills at a slower rate and that the 'economically disadvantaged' are more likely to experience cognitive delay (*Hillemeier et al, 2009*). Furthermore, it was also found that children experiencing cognitive delay are at a higher risk for poor mental health throughout their lives (*Hillemeier et al, 2009*). Poor mental health could result in an increase in health-related absences, or poorer institutional performance. Sufferers may have issues regarding motivation or a lack of confidence, and this could impact their performance. Thus, in the long term affecting their intelligence.

Early estimates of intelligence inheritability were around 70% (*Murray & Heinstein, 1994*). More recently, it's been suggested that nature and nurture aren't two separate entities, and there is instead an interaction between the two. (*Makharia et al, 2016*) suggested that children in poverty don't develop to their 'full genetic potential' due to the environment they're presented with, and this could be because genetics are triggered by the surrounding environment. We can infer that this is a consequence of a lack of resources (*Hazzouri et al, 2017*). This supports the idea that income is a probable explanation for the relationship between SES and intelligence. One's access to resources is based on their income, if they cannot afford the same

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materials as their peers, they aren't presented with an equal opportunity to achieve their full academic ability.

Although it is assumed that the parents are the overall breadwinner, some children may have to get a job alongside full-time education to support their parent's income. This presents a 'time' opportunity cost to them. They may have less time to spend studying, which could result in them underperforming in exams. More likely, they may not continue in further education and start working immediately instead (Neyt, Omey, Verhaest & Baert, 2017). For example, a school-leaver may be intelligent enough to continue to university, however they may not be able to afford to go. *Neisser et al (1996)* found that attending school/university increases your IQ. If you don't have the opportunity to attend further education due to a lack of resources, you don't have the opportunity to develop intelligence to the same extent as others in society. Consequently, this means that those in lower socioeconomic conditions are less intelligent as a direct result of low income.

Low income can also result in parents not providing their children with the adequate experiences needed for children to reach their full potential. The neuroplasticity of the brain allows it to develop based on experience (*Jensen, 2009*), if children aren't given the same opportunities as their wealthier peers they are unlikely to achieve their full potential.

Another way that low income can indirectly influence intelligence, is through the stress imposed with it. Research has found that the stress of low income is associated with glands in the brain that're also associated with cognition

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(Hazzouri et al, 2017). Arguably, living in a poor condition is more stressful than being in a comfortable one. In the long term, this can have damaging effects on cognitive function. Thus, the hindered cognitive functioning results in individuals not performing to full potential.

Although the stress associated with low income is likely to weigh heavy on the parents within a family, children are arguably just as exposed to this emotion. Consequently, they may also feel the pressure of any issues related to low income. Their cognition could fall victim to the stress, resulting in an inability to achieve their full academic prospect.

In conclusion, I have confidence that parental influence is the strongest explanation mediating socioeconomic status and intelligence. Findings have suggested that brains are designed to 'reflect' their surrounding environment as opposed to 'rise above' them (Jensen, 2018). As our parents play a significant part in our lives, I believe that their values and behaviours hold sufficient power over our actions, more so than any other discussed elements. They don't only provide us with our genotype, but also create the environment by which we are raised in.

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