

[News story: Dstl experts decode the science behind falling in love](#)

Love is a well-studied, but little understood phenomena. Evolutionary psychology suggests that love is a way for us to attract and retain a mate enabling the reproduction and caring of offspring, but that doesn't explain how we fall in love or what it looks like.

Psychologist and neuroscientists alike have attempted to quantify the reasons behind how we fall and stay in love; while there are many different psychological and neurological theories, love triads seem to be a common theme.

The filter theory (Kerckhoff and Davis, 1962) proposes that when we are looking to identify a suitable partner we filter down the population of potential mates based on three criteria.

Firstly, we consider social demographics; we are more likely to select a partner who has a similar background, this could be geographical closeness, closeness in social class, ethnicity or education level. When we have filtered appropriate individuals we next refine our pool based on similarity in attitudes. Finally, we apply a filter to identify complimentary characteristics, we don't necessarily want someone who is just like us, but someone whose traits compliment ours (e.g. a creative person might come up with holiday ideas whilst their partner may be good at organising to help plan the trip).

A triangular theory of love (Sternberg, 1986) proposes that love can be understood in terms of three components; intimacy (e.g. feelings of closeness and forming bonds), passion (e.g. physical attraction and excitement) and decision/commitment (in the short-term we decide to love a partner and in the long term the commitment to maintain that love). Whilst the three components common to loving relationships, each may present differently from one relationship to another, or over time within a given relationship resulting in unique relationships.

Neuroscientists would also claim that love can be broken down into three aspects. When an individual falls in love there is an increase in the activity of brain regions that contains high concentration of dopamine which is associated with reward, desire, addiction and euphoric states. Conversely, there is a decrease in activity of the amygdala, normally this is engaged during fearful situations this decrease implies a lessening of fear. Concurrently there is a decrease in frontal cortex activity resulting in a relaxed judgement.

Dstl has a wide variety of jobs for scientists, including our neuroscientists, who work on solutions for Defence and Security and for keeping people safe in the UK and abroad. If you are interested in working for Dstl look out for [roles here](#) – we are sure that you would love to work

with us!

[News story: Agreement sets sights on the future](#)

Sellafield Ltd signed with the National Nuclear Laboratory.

Sellafield Ltd has signed an agreement that will introduce a significant change in the way it works with its major partner, the National Nuclear Laboratory (NNL).

Both have a long and proud history of working together – and the new Technical Services Agreement (TSA) is designed to strengthen that history and set the direction for years to come.

The 2 organisations signed a collaboration agreement in October 2016. The TSA aligns with this and provides the legal procedures for placing work between the 2 companies.

Sellafield Ltd, Technical Director, Rebecca Weston said:

This 17 year agreement is about applying a long term view to our work – which will help us work better and nurture the game changing ideas we need to achieve our mission, as well as giving the confidence to invest in the development of skills for the long term.

We have many examples of fantastic collaborative work with NNL across our portfolio, although many areas where we don't. This will help spread that collaborative approach and make it more consistent.

It will enable us to make the best use of skills across our two organisations and very importantly proactively develop our supply chain and academic and national laboratory links, being smarter in the way we divide work up and getting the right people together to deliver what we need.

Chief Executive Officer of NNL, Dr Paul Howarth said:

“We have a strong, multi-faceted and unique relationship with Sellafield Ltd. A large portion of our work has also been associated with Sellafield and the site hosts around half our workforce and our biggest nuclear facilities.

“This new partnering approach will enable us to work much closer with Sellafield Ltd on new innovative approaches to help tackle the challenges on the site and will enable us to bring in supply chain companies, academia and small to medium enterprises across different technology sectors that may be able to offer innovative solutions.”

Press release: Horticulture Connect: Linking Rwanda Products to The World

The 14th and 15th February will see the launch of Horticulture Connect, a ‘first of its kind’ conference promoting horticultural market links between the United Kingdom, the Netherlands and Rwanda, held at Kigali Convention Center. This conference provides a strong opportunity to introduce British and Dutch investors and buyers of horticultural produce to Rwandan producers and exporters, and the event will be a starting point in creating firm trade and investment opportunities.

The British High Commission, working with Lord Dolar Amarshi Popat, the UK Prime Minister’s Trade Envoy to Uganda and Rwanda, have been at the forefront of establishing an air link between the United Kingdom and Rwanda. In addition, Lord Popat has visited the country to advocate on behalf of British business interest as well as to encourage increased trade and investment between the two countries. On his most recent visit, he discussed with the Rwanda Development Board the possibility of hosting a horticulture market conference that would enable increased Rwandan exports of flowers as well as fruits and vegetables to the UK using the newly established air link.

A trusted airlink between Kigali and Amsterdam was already established in 2010 with 5 flights per week, and since April 2013, KLM serves Kigali by a daily flight, connecting Rwandan products to the European market. The Netherlands actively supports the horticulture sector in Rwanda, and through its global auctioning system in flowers provides an enabling infrastructure for potential future exports to the UK and other European destinations. The recently developed HortInvest Program, which is financed by the Netherlands, aims to develop the horticulture value chains in Rwanda. For this event, 2 Dutch importers of horticultural produce (Van Oers United and Del Monte Foods) will visit Rwanda and meet with their potential business partners.

Establishing these types of connections is critical to growing Rwanda’s exports and opening up opportunities for investors. A recent visit by the private sector players with NAEB and RwandAir to the UK New Covent Garden Market has indicated the need to further explore opportunities for developing more robust trade relations in exports of fresh produce. Rwandan horticultural exporters currently face significant market access constraints

mainly due to the lack of effective connections to European markets. On this last point, the UK Department for International Development (DFID) and the Netherlands embassy in Rwanda see strong prospects for the horticulture sector's role in driving economic development. Sarah Metcalf, Head of DFID Rwanda said: "Horticulture Connect presents an exciting opportunity to engage with local and international businesses on the themes of inclusive economic growth and rural livelihoods. We also look forward to showcasing DFID programmes and partners contributing to Rwanda's growing horticulture sector, such as TMEA (Trade Mark East Africa), AFR (Access to Finance Rwanda), and FONERWA (Rwanda's national Climate Change fund)".

Hon. Gerardine Mukeshimana, the Minister of Agricultural and Animal Resources said, "The conference seeks to move beyond the conversations held before and create a business platform that provides delegates with tangible opportunities to establish relationships and engage with our local producers. It is one of the key factors in the growth of investment in agri-export sector."

Rwanda is known for offering investment opportunities and is among the region's fastest growing economies. Rwanda has been frequently on top rankings for the best place to do business and to invest in Africa, with an average GDP growth of 8% for the last decade.

End.

Notes to Editors: □ DFID Rwanda has a range of programmes supporting the agricultural sector, including a major £43m Programme of Support to Agriculture (POSA), a £23.5m Improving Market Systems for Agriculture in Rwanda (IMSAR) programme, and others important to the sector such as TMEA (Trade Mark East Africa), AFR (Access to Finance Rwanda) and FONERWA (Rwanda's national Climate Change fund). □ Further information about DFID's activity in Rwanda is available at <http://devtracker.dfid.gov.uk/countries/RW/> and <https://www.gov.uk/world/organisations/dfid-rwanda>. □ The Kingdom of the Netherlands also has a range of programmes supporting the agricultural sector in Rwanda, including a \$22M donation to the Multi Donor Trust Fund for Feeder Roads, an Integrated Water Resources Program of \$44M that will run until 2020, a Landscape Restoration Program of \$19 M that will start this year and will run for 4 years and a Horticulture Value Chain Development Program (HortInvest) of \$20M that started recently and will run for 4 years. □ The export of horticulture products from Rwanda to the Netherlands in 2016 was worth \$625.000 (mainly cut flowers, vegetables and plant extracts), while the import was worth \$390.000 (mainly seeds).

News story: Multiplication tables check trials to begin in schools

A select number of schools across the country will start trialling the multiplication tables check from next month, the Schools Standards Minister Nick Gibb has announced today (Wednesday 14 February).

The multiplication tables check is designed to help ensure children in primary school know their times tables up to 12 off by heart. As well as being critical for everyday life, knowledge of multiplication tables helps children to solve problems quickly and flexibly, and allows them to tackle more complex mathematics later on in school.

In the primary assessment consultation run by the government last year, the majority of the sector said that Year 4 would be the best point to run a check on progress being made.

The check follows the successful introduction of the phonics screening check in 2012. There are now 154,000 more six-year-olds on track to become fluent readers than in 2012 and England's recent rise up the international PIRLS rankings puts the success of the government's reforms on a global scale.

School Standards Minister Nick Gibb said:

Academic standards are rising in our schools thanks to our reforms and the hard work of teachers, with 1.9 million more pupils in schools rated good or outstanding than in 2010. It is important to have an assessment system that continues to drive this improvement.

Just as the phonics screening check helps children who are learning to read, the multiplication tables check will help teachers identify those pupils who require extra support. This will ensure that all pupils leave primary school knowing their times tables by heart and able to start secondary school with a secure grasp of fundamental arithmetic as a foundation for mathematics.

The new on-screen check will last no longer than five minutes and is similar to the checks many schools use already. It will enable teachers to monitor a child's progress in a consistent and reliable way but has been carefully designed to avoid causing additional stress for children and teachers.

It will be sat by 8 and 9 year olds in Year 4, after teachers and schools told the Government this was the best point for it to be introduced. Results from the check will not be published at school-level, and will not be used by Ofsted and others to force changes in schools.

The system is being developed in active partnership with schools, with two trials already completed. This consolidation of basic mathematical knowledge

is in line with the principle of the maths 'mastery' pedagogy, which is successfully practised by world leaders in mathematics, Shanghai and Singapore and is now being introduced to schools in England.

In the most recent Trends in International Mathematics and Science Study (TIMSS), England's mean score was 546, compared to Singapore which scored 618, topping the study for maths at both year 5 and 9. Approaches like this aim to close that gap and raise national standards in mathematics.

The multiplication tables check was announced as part of the government's response to its primary assessment consultation last year. This consultation proposed a number of other changes to make assessment in primary schools more accurate and reduce the burden of tests on teachers and children.

This trial comes ahead of the national voluntary roll out of the multiplication tables check for all Year 4 pupils from June 2019, before it becomes mandatory in June 2020. A national sample of schools has already been selected to participate in the trials and they will soon receive their invitation to participate. The trials will ensure the check is robust, accessible and minimises any additional burden on schools as a new assessment.

The trials follow a recent commitment from the Education Secretary to continue to improve academic standards in order to deliver a truly world-class education that not only inspires young people to make the most of their lives but also gives them the opportunity to fulfil their ambitions, no matter where they live.

Multiplication tables trials will make a positive contribution to the government's commitment through the Industrial Strategy to drive up the study of maths, ensuring that more students leave education at age 18 with a basic level of numeracy, improving the take up of maths qualifications and tackling STEM skills shortages in the economy.

[Speech: Foreign Secretary Boris Johnson's Press briefing in Bangladesh](#)

Foreign Secretary Boris Johnson's Press Briefing Transcript:

Thank you your Excellency, it's wonderful to be here in Bangladesh on my first visit. This is a relationship that is incredibly important for the UK. It is hard to overstate the cultural, commercial and personal links between Britain and Bangladesh. We are proud to have I think 500 thousand people of Bangladeshi origin in our country and I want to convey an important message, which is that once we are leaving the European Union, we will want to intensify our bilateral relations and do more in trade together, as well as

of course trading with the rest of the Europe.

I also want to congratulate Bangladesh and the people and the government of Bangladesh on the way they have handled one of the biggest humanitarian crisis we have seen in the last few decades. I think that the government of Bangladesh has shown immense compassion, speed and mercy in dealing with a challenge that I think any government would have found very daunting indeed. I am going tomorrow to Cox's Bazar to look at the camps, to look at some of the contribution that the UK is able to make to helping with that extraordinary Bangladeshi humanitarian effort.

And the third thing I want to say is that, we had an excellent meeting, I thought, with the Prime Minister. It went, it was very long and very friendly, and we discussed all the issues of cooperation between the UK and Bangladesh, the success of Bangladesh, as it rises up inexorably and the population grows more successful, we also discussed the importance of a free press and free, fair and democratic elections.

And I am delighted that the Prime Minister Sheikh Hasina will be coming to our Commonwealth Summit in April where she is going to be majoring on female education, 12 years of quality female education which is again one of the areas where Bangladesh has got an absolutely outstanding track record.

So, thank you again for having me along today, see you all soon!