

## Future Trends Report Based on Analysis of the Future Scene in Mid-Term and Final Evaluation

### STEP 1. Identify Challenges

Read the Future Scene carefully and generate ideas for challenges, concerns, and possible related problems. Choose the 5 most important challenges and write them in the space provided. Include applicable research with appropriate in-text citations.

#### Challenge #1:

1. It is stated in the future scene that the youngsters do not listen to their elderly parents anymore. This could contribute to a lack of respect for the elderly, especially among the younger generation, and some of the elderly who firmly believe in such traditional values may thus feel marginalized and hurt by such disrespect which may affect their attitudes toward society, such as being distrustful towards the younger generation, which may lead them to isolate themselves from their children and grandchildren, leading to loneliness.
  - a. Elsworthy, E. (2018, January 30). Just one in five young people spend time with their grandparents, study finds. Retrieved from <https://www.independent.co.uk/life-style/grandparents-forgotten-young-people-survey-pensioners-elderly-caps-grandchildren-a8184816.html>
    - i. The source states that in a study of one thousand 5 to 18 year-olds, a quarter of them only visited their grandparents for pocket money, and even though 65% see their grandparents every week, however, 37% claim they only do this because they are forced to.
    - ii. This would cause them to have a lack of respect for the elderly, and this would also cause the elderly to isolate themselves from their grandchildren, as can be seen from how the elderly woman did not miss her grandchildren and even felt "mildly irritated" by her son Jason's visit.
  - b. Knapton, S. (2015, December 7). Lack of respect for elderly may be fuelling Alzheimer's epidemic, warn scientists. *The Telegraph*. Retrieved from <https://www.telegraph.co.uk/news/health/elder/12037426/Lack-of-respect-for-elderly-may-be-fuelling-Alzheimers-epidemic-warn-scientists.html>
    - i. This article shows how elderly who are exposed to or believe in stereotypes about aging — such as the assumption that aging causes one to degenerate mentally and physically — have a much higher chance of becoming a "stereotypical" elderly person.
    - ii. The negative thoughts may affect the brain and increase the chance of diseases such as Alzheimer's disease, a form of dementia.
    - iii. The lack of respect in the youth in the scenario may cause many problems to the elderly such as dementia and this would impact their mental health.
  - c. Bai, X., Lal, D. W., & Guo, A. (2016, March 09). Ageism and Depression: Perceptions of Older People as a Burden in China. Retrieved from <https://spssi.onlinelibrary.wiley.com/doi/pdf/10.1111/josi.12154>
    - i. Study done on 954 Chinese adults over 60 years old. After taking into account sociodemographic, health, family relations as variables, it was found that participants with stronger views of older people being a burden to their family and society were at higher risk of depressive symptoms.
    - ii. This shows that lack of respect from the younger generations and marginalizing attitudes, such as isolation, towards the elderly may cause them to feel useless and a burden towards their family or society. This in return will lead to them being at a higher risk of developing depression.

#### Challenge #2:

1. It is stated that the elderly woman was adamant not to accept help from the healthcare centre. This shows her willingly isolating herself from others, even from those that are offering her help. Such habits which could be caused by the disrespect coming from the younger generation, could result in the separation of elderly from the society and could potentially lead to loneliness which may be detrimental to her mental health.
  - a. Cornwell, E. Y., & WAITE, L. J. (2009, March). Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2756979/>
    - i. Study States impacts of social isolation and deliberate isolation as having a generally negative effect on mental health especially among older adults
  - b. Gleckman, H. (2017, November 29). The Risks Of Social Isolation For Older Adults. Retrieved from <https://www.forbes.com/sites/howardgleckman/2017/11/29/the-risks-of-social-isolation-for-older-adults/>
    - i. This article states that socially isolated people tend to be sicker and die sooner.
    - ii. It also results in a larger amount of money being spent on medical and healthcare services
  - c. Bhatti, A. B., & Haq, A. U. (2017, January 24). The Pathophysiology of Perceived Social Isolation: Effects on Health and Mortality. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5367921/>
    - i. Social Isolation can result in depression, cognitive decline, and sleep problems. All of which lead to a decline in one's health

**Challenge #3:**

1. Furthermore, it is stated that two working elderly were dismissed from their workplace. Such lack of job opportunities for them give them little reason to interact with the rest of society, this may lead to them being cooped up at home and lonely as they have little opportunity to interact with the rest of society, which could be detrimental to their mental health.
  - a. Loneliness & Isolation. (n.d.). Retrieved from <https://www.lifeline.org.au/get-help/topics/loneliness-isolation>
    - i. Australian suicide prevention website. States that common causes of loneliness include
      1. Being laid off from a job
      2. Feeling of uselessness shutdown -s -f /t 00
      3. of purpose
      4. Living alone
    - ii. The above mentioned occur as a result of the elderly being replaced by robots.
  - b. Lee, G. R., & Ishii-Kuntz, M. (1987). Social interaction, loneliness, and emotional well-being among the elderly. Research on aging, 9(4), 459-482. Retrieved from <http://journals.sagepub.com/doi/10.1177/0164027587094001>
    - i. This study examines the link between loneliness and emotional well-being in the elderly.
  - c. Brody, J. (2018). The Surprising Effects of Loneliness on Health. Retrieved from <https://www.nytimes.com/2017/12/11/well/mind/how-loneliness-affects-our-health.html>
    - i. Research in 2013 found that impair health by raising stress hormones and inflammation, which in turn lead to the increase in the risk of heart disease, arthritis type two diabetes, dementia and in more serious cases, suicide attempts. A study conducted over 6 years found that isolation of the elderly gradually took away their ability to take care of themselves such as being able to prepare meals or groom themselves.
    - ii. Study of a group of adults age 50 or older found that loneliness was linked to worsening cognitive function.

**Challenge #4:**

1. It is also stated that the government was not doing much to help the increasing elderly population, and was more concerned with the youths than the elderly. The price of devices like the 'Elderwatch Sensor' that helped to take care of the elderly were high, and the quality of the services such as the Elderwatch Smartscreen and the Silver Generation Healthcare Centres were poor. Thus, the elderly may not be able to afford the services, or would not want to waste their money on such poor services. This deprives the elderly of a chance to move around and gives them another reason to stay at home, and this may lead to dementia or other diseases that are detrimental to their mental health.
  - a. Lim, Yvonne. "Social Isolation and the Elderly Poor in Singapore." Channel NewsAsia, 19 May 2017. [www.channelnewsasia.com/news/cnainquirer/lonely-and-waiting-to-die-singapore-s-elderly-poor-find-hope-in-8844768](http://www.channelnewsasia.com/news/cnainquirer/lonely-and-waiting-to-die-singapore-s-elderly-poor-find-hope-in-8844768).
    - i. This Article states how less well off elderly who did not have sufficient social services, even with government subsidies, suffer from poor mental health due to loneliness.
    - ii. This would be worse with the poor quality and high cost of the services available in the scenario.
    - iii. This shows that lack of appropriately priced quality social services and goods to help the elderly affects their quality of life and mental health.
  - b. Goar, C. (2013, July 10). Opinion | Seniors marginalized by youth-obsessed society: Goar. Retrieved from [https://www.thestar.com/opinion/commentary/2013/07/10/seniors\\_marginalized\\_by\\_youthobsessed\\_society\\_goar.html](https://www.thestar.com/opinion/commentary/2013/07/10/seniors_marginalized_by_youthobsessed_society_goar.html)
    - i. This article states that in Canada, 68% and 57% of women over the age of 65 and men over the age of 65 respectively experienced ageism.
    - ii. Ageism refers to the discrimination against groups of individuals because of their age.
    - iii. This situation in Canada can just as easily happen in Singapore as shown in the scenario, where the government care more about "the youths of tomorrow than the elderly folks of the past".
  - c. C. Morrison, C. (2018, July 16). More than a million older workers locked out of work due to age discrimination, MPs' report says. Retrieved from <https://www.independent.co.uk/news/business/news/age-discrimination-uk-work-old-jobs-women-equalities-committee-mps-a8450066.html>
    - i. In the UK, the government was accused of failing to address discrimination against the elderly, which resulted in more than 1 million workers over 50 years of age being left out of jobs.
    - ii. this shows that if the government in the future scenario chooses to focus more on youths and neglects the elderly, many will lose their jobs and end up cooped up at home, hence increasing the chance of them developing mental illnesses.

**Challenge #5:**

1. Due to the huge advancements in technology, cafes and other eateries have been replaced with drone delivery services, making physical interaction between the elderly become minimal. Elderly are involved in several group chats, where they only text each other, and do not even talk face-to-face. This causes them to slowly separate from society, and for their relationships to slowly fade away. This may cause loneliness in the elderly, negatively affecting their mental health.
  - a. Donnelly, L. (2015). *Low levels of face-to-face social contact 'can double depression risk'*. Retrieved from <https://www.telegraph.co.uk/news/health/news/11912255/Low-levels-of-face-to-face-social-contact-can-double-depression-risk.html>
    - i. Strong links were found between face-to-face contact and depression, but regularity of contact with loved-ones by telephone, email or social media was shown to make no difference
    - ii. Research on 11,000 adults found that those who meet friends and family at least three times a week are far less likely to suffer from depression. Individuals who had such contact just once every few months had an 11.5 percent chance of later suffering from depressive symptoms two years later.
  - b. Bergland, C. (2015, October 05). Face-to-Face Social Contact Reduces Risk of Depression. Retrieved from <https://www.psychologytoday.com/us/blog/the-athletes-way/201510/face-face-social-contact-reduces-risk-depression>
    - i. A study done has shown that people who met with family and friends face-to-face at least 3 times a week, had the lowest level of depressive symptoms (6.5%), rather than those who met up only once every few months, who had a higher level of depressive symptoms, at 11.5%
  - c. The Negative Impacts of Social Media on Face-to-Face Interactions. (2015, December 1). Retrieved from <https://rampages.us/peasedn200/2015/12/01/final-inquiry-project/>
    - i. This study has shown that social media results in less face-to-face interaction, and also decreases the quality of these interactions, which results in poorer social and linguistic skills, which could lead to separation from society

## STEP 2. Select a Fundamental Problem

Using the challenges listed in Step 1, identify a problem of major importance to the Future Scene situation. Write your Underlying Problem making sure your question clearly explains the action that will be taken and the desired results/goal of that action.

Incorporating Challenge(s) # 1, 2 and 5

### Underlying Problem:

Given that the elderly are likely to choose to remain lonely at home, due to increasing marginalization by society, **how might we implement a strategy that is applicable and engaging to all ages especially the elderly (KVP) so as to encourage the elderly in Singapore to interact more with others (P) in the year 2020 and beyond.**

**STEP 3. Produce Solution Ideas**

Generate solution ideas to the Underlying Problem in Step 2. Choose the 5 most effective solutions and write the elaborated ideas in the space provided. . Include applicable research with appropriate in-text citations.

**Solution #1:**

1. We, the Ministry of Loving Elderly (MOLE) will install a Elder Smartscreen Version 2 software onto all television devices owned by elderly persons in Singapore which will track their channel history and programmes watched so as to introduce them to other elderly persons of similar interests who watch similar programmes. This will give them opportunities to talk to newfound friends with similar interests and watch their television programmes together. This software will be remotely uploaded and in motion by 2054.
  - a. Schlozman, S. (2017). *The benefits of watching TV with your kids*. Retrieved from <https://health.usnews.com/wellness/for-parents/articles/2017-11-27/the-benefits-of-watching-tv-with-your-kids>
    - i. Proves that watching the same television show can allow for common conversation topics and be integral in bonding and interaction
  - b. Gomillion, S. (2017, October 25). The Hidden Relationship Benefits of Binge-Watching. Retrieved August 5, 2018, from <https://www.scientificamerican.com/article/the-hidden-relationship-benefits-of-binge-watching/>
    - i. Proves that watching television shows with friends allow a closer relationship between them
  - c. Chui, D. (2016, November 24). Watching TV can improve your friendships and relationships. Retrieved from <https://www.marieclaire.co.uk/entertainment/tv-and-film/how-films-and-tv-will-improve-your-relationships-and-relationships-442958>
    - i. Watching shows with friends improves your relationship when you experience the emotions together

**Solution #2:**

1. We, MOLE will create a gaming app to be launched in the Google Play store and Apple App Store in all smart devices registered in Singapore. The objective of the game would be to collect certain items by visiting people in certain areas or blocks in Singapore. Both parties will then get the in-game reward. This will motivate the elderly and the young alike to call up their old friends or family members for more frequent visits and increase their face to face interaction with them. This app should be in production by 2051 and fully launched by 2053.
  - a. Texas A&M University. (2016, July 15). Health benefits of Pokémon Go. *ScienceDaily*. Retrieved July 9, 2018 from [www.sciencedaily.com/releases/2016/07/160715181715.htm](http://www.sciencedaily.com/releases/2016/07/160715181715.htm)
    - i. The app Pokémon Go is said to motivate people to venture around the community
    - ii. "providing opportunity for social interaction and increasing our sense of belonging, which can have a positive impact on our emotional and mental health.
    - iii. it could further be built upon to ensure that two players must meet up and visit someone from the block.
  - b. Watanabe, K., Kawakami, N., Imamura, K., Inoue, A., Shimazu, A., Yoshikawa, T., ... Tsutsumi, A. (2017). *Pokémon GO and psychological distress, physical complaints, and work performance among adult workers: a retrospective cohort study*. Retrieved from <https://europepmc.org/articles/pmc5589944>
    - i. Shows how playing such games had positive effect on psychological distress and mental health.
  - c. Hayes, R. (n.d.). The Unexpected Health Benefits of Pokémon Go. Retrieved from <https://www.sharecare.com/health/wellness-healthy-living/article/health-benefits-pokemon-go>
    - i. Proves that games like pokemon Go can increase physical activity, boost one's mood and keep one's brain sharp

**Solution #3:**

1. We, MOLE, will create an app, which scans the elderly, allowing the system to create a hologram which can be projected through other people's devices. This allows the elderly to interact with their friends, family, or even find new friends, by collaborating with the Elder Smartscreen Version 2. Holographic sports can be played, such as tennis, basketball, or even bowling. This will ensure that the elderly can stay fit, while making new friends through the playing of games.
  - a. Theng, Y. L., Chua, P. H., & Tan, P. P. (2012). *Wii as entertainment and socialisation aids for mental and social health of the elderly*. Retrieved from <https://dl.acm.org/citation.cfm?id=221284>
    - i. It is stated that playing wii has a multitude of benefits for the elderly, toward their mental health, physical health
    - ii. It also helps to promote social interaction and active lifestyle.
  - b. Jung, Y., Koay, J. L., Ng, J. S., & Lee, K. L. (2009). *Games for a better life: Effects of playing Wii games on the well-being of seniors in a long-term care facility*. Retrieved from <https://dl.acm.org/citation.cfm?id=1746055>
  - c. Kalhbaugh, P. E., Sperandio, A. J., Carlson, A. L., & Hauselt, J. (2011, December 16). *Effects of playing Wii on well-being in the elderly: Physical activity, loneliness, and mood*. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/01924788.2011.625218>
    - i. Shows that playing sports with a partner can lower the feeling of loneliness, and thus creating a more positive attitude

**Solution #4:**

1. We, the MOLE, will manufacture robot companions to be installed in the homes of elderly so that they will have a companion to talk to and interact with so as to prevent loneliness, which can be detrimental to the elderly's already weakened health. These robots could potentially collaborate with the Elder Smartscreen Version 2, which monitors the user's interests. This could help the robot when conversing with the elderly, if it knew what the elderly's interests are.
  - a. [http://web.mit.edu/sturkle/www/ICRA\\_Paro.pdf](http://web.mit.edu/sturkle/www/ICRA_Paro.pdf)
  - b. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.714.6939&rep=rep1&type=pdf>
  - c. Taheri, A., Alemi, M., Meghdari, A., Pouretamad, H., Basiri, N. M., & Poorgoldooz, P. (2015, October 26). *Impact of Humanoid Social Robots on Treatment of a Pair of Iranian Autistic Twins*. Retrieved from [https://link.springer.com/chapter/10.1007/978-3-319-25554-5\\_62](https://link.springer.com/chapter/10.1007/978-3-319-25554-5_62)
    - i. This study shows how the robots can be carefully tailored to socialise with different individuals and teach people different social skills
    - ii. These robots successfully helped autistic people learn social skills in a more tailored environment
    - iii. This can also be done for the elderly

**Solution #5:**

1. We, the MOLE will implement a policy which mandates that all elderly persons above 65 will have a special chip embedded into their mobile electronic devices. This chips use location sensors to connect with others of the similar variety in shops. The chip will inform the physical staff member who should serve the elderly. This will increase face to face interaction between the elderly and others and ensure they have a face to talk to. These chips will begin manufacture in 2050 and the policy will be in place island wide in 2053
  - a. Australian Institute of Business. (2018). Face-to-Face Communication in the Digital Age. [online] Available at: <https://www.aib.edu.au/blog/communication/face-to-face-communication-in-the-digital-age/> [Accessed 5 Aug. 2018].
    - i. This research study shows that especially in the digital age, one must not forget the importance of face to face interaction, especially in the world of business.
    - ii. However, this is especially because of the need to maintain social skills, which is also vital for the elderly
  - b. Ashton College. (2018). The Importance of Face-to-Face Communication. [online] Available at: <https://www.ashtoncollege.ca/the-importance-of-face-to-face-communication/> [Accessed 5 Aug. 2018].
    - i. This article explains the importance of face to face communication in order to maintain good mental health.
    - ii. Insufficient face to face interaction have shown to lead to diseases like dementia and depression, especially among older adults.
  - c. Scholarsmine.mst.edu. (2018). [online] Available at: [https://scholarsmine.mst.edu/cgi/viewcontent.cgi?article=3306&context=doctoral\\_dissertations](https://scholarsmine.mst.edu/cgi/viewcontent.cgi?article=3306&context=doctoral_dissertations) [Accessed 5 Aug. 2018].
    - i. This article further reiterates the negative impacts of less face to face interaction
    - ii. It also states that sufficient face to face interaction will help people to have a more "pleasant mood"

**STEP 4a. Select Criteria**

Generate criteria to determine which solution idea does the best job of solving your Underlying Problem and/or addressing the Future Scene situation. Select the 3 most important criteria for measuring solution ideas and write them in the spaces provided.

**Criterion #1:**  
Which solution will be the cheapest for the Ministry to implement such that it will place less financial stress on the country?

**Criterion #2:**  
Which solution would be the most sustainable for the elderly such that the Ministry would not have to think of another solution in the next few years?

**Criterion #3:**  
Which solution is the most viable for the elderly with physical or mental needs such that the most number of elderly may benefit from the solution?

**STEP 4b. Apply Criteria**

List the solution ideas from Step 3 on the grid. Use each criterion to rank the solutions on a scale from 1 (poorest) to 5 (best). The weighting for one important criterion may be doubled if necessary.

Step 3 Sol'n #	Solution Idea	Criteria			Total
		1	2	3	
#1	Elderwatch Smartscreen V 2.0	4	5	4	13
#2	Collectors Game	5	2	3	10
#3	Holographic Sports	2	4	1	7
#4	Robot Friend	1	1	5	7
#5	Linking Chips	3	3	2	8



**STEP 5. Develop an Action Plan and Evaluate its Feasibility**

Develop your top-scoring solution idea into an Action Plan. Thoroughly explain how the Underlying Problem is solved, how the plan will be implemented, and how the Future Scene will be affected. Explain how this Action Plan is feasible with research consulted.

**Action Plan derived from Solution #1:****Who will implement the solution?**

We, Ministry of Loving Elderly, a new branch of the government aiming to encourage the elderly and the society to interact more with each other, will work with a local Singaporean tech firm, Pear.Inc.

**What will we do?**

We will develop a Smartscreen Version II software which will begin production in 2050 and rolled out by 2053. These new features will be spearheaded and promoted by the government with advertisements all over Singapore.

**How exactly will it work?**

- The new version will
  - Build on previous Version (Continue Screening Television Broadcasts)
  - Connect two users together (young and old alike) who watch similar programmes
  - Allow them to exchange contact details
  - Incentivize them to watch their favourite television programmes together by giving out points which can be exchanged for rewards

**Other features**

- Chatrooms for users to connect with one another
- These chatrooms also allow for video calling
- Compatible with Wii Sports and other console games to encourage an active lifestyle among the elderly

**How will this solve our problem?**

- Watching Television together
  - the elderly can interact more with fellow Singaporeans.
  - they can also meet more people who have similar interest
  - watching television together also provide common topics for the users to talk about
- Chatrooms and Video Calls
  - allow the elderly to have face to face interaction with others through Holographic video calls

Writing on the reverse side or in margins will not be scored.

**(Action Plan Continued)**

- allow for elderly to maintain interaction and contact with their newfound and old friends
- Allows elderly to maintain their linguistic and social skills
- Meeting New People
  - We hope that the users may move beyond watching television to deepen their friendship by going out together
  - This will allow for the elderly to feel less lonely and be more encouraged to go out

**Time frame for implementation**

2050 - Pear.Inc will begin production of the software. The Ministry will oversee the process.

2052 - Software should be completed and tested by a tech savvy pilot group made of both young and old by the Ministry. Edits will be made accordingly.

2053 - Software should be remotely uploaded to existing smartscreens . Concurrently, the Ministry will work with social media influencers and television broadcasters to advertise about the new features.

2060 - App will be reviewed for further changes and edits, updates etc.

## Bibliography

Cite the resources you consulted using the APA format.

### List of References:

- (n.d.). Retrieved August 16, 2017, from <https://www.moe.gov.sg/about>
- (n.d.). Retrieved August 16, 2017, from [https://www.pa.gov.sg/About\\_Us](https://www.pa.gov.sg/About_Us)
- Rob O'Brien - Special to CNBC.com. (2013, September 24). Smartphones struggle to connect with the elderly. Retrieved August 16, 2017, from <https://www.cnbc.com/2013/09/22/smartphones-struggle-to-connect-with-the-elderly.html>
- (n.d.). Retrieved August 16, 2017, from [https://www.pa.gov.sg/Our\\_Programmes/Lifeskills\\_and\\_Lifestyle/Seniors\\_for\\_Smart\\_Nation](https://www.pa.gov.sg/Our_Programmes/Lifeskills_and_Lifestyle/Seniors_for_Smart_Nation)
- (n.d.). Retrieved August 16, 2017, from [https://www.pa.gov.sg/Our\\_Programmes/Lifeskills\\_and\\_Lifestyle](https://www.pa.gov.sg/Our_Programmes/Lifeskills_and_Lifestyle)
- Reading, the library, and the elderly: A Singapore case study. (n.d.). Retrieved August 16, 2017, from [https://www.researchgate.net/publication/270618807\\_Reading\\_the\\_library\\_and\\_the\\_elderly\\_A\\_Singapore\\_case\\_study](https://www.researchgate.net/publication/270618807_Reading_the_library_and_the_elderly_A_Singapore_case_study)
- Chia, A. (2017, March 15). IT courses now available for seniors at community clubs. Retrieved August 16, 2017, from <http://www.channelnewsasia.com/news/singapore/it-courses-now-available-for-seniors-at-community-clubs-8125636>
- Wakefield, J. (2015, May 25). The generation that tech forgot. Retrieved August 16, 2017, from <http://www.bbc.com/news/technology-32511489>
- Lifeline Australia. (n.d.). *Loneliness & Isolation*. Retrieved from <https://www.lifeline.org.au/get-help/topics/loneliness-isolation>
- Cornwell, E. Y., & Waite, L. J. (2009). Social Disconnectedness, Perceived Isolation, and Health among Older Adults. Retrieved from PubMed Central website: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2756979/>
- Donnelly, L. (2015). *Low levels of face-to-face social contact 'can double depression risk'*. Retrieved from <https://www.telegraph.co.uk/news/health/news/11912255/Low-levels-of-face-to-face-social-contact-can-double-depression-risk.html>
- Lim, Y., Han, J., & Cunico, K. (2017). Lonely and 'waiting to die', Singapore's elderly poor find hope in many helping hands. Retrieved from Channel News Asia website: <http://www.channelnewsasia.com/news/cnainsider/lonely-and-waiting-to-die-singapore-s-elderly-poor-find-hop-e-in-8844768>
- Theng, Y. L., Chua, P. H., & Tan, P. P. (2012). *Wii as entertainment and socialisation aids for mental and social health of the elderly*. Retrieved from <https://dl.acm.org/citation.cfm?id=221284>
- Jung, Y., Koay, J. L., Ng, J. S., & Lee, K. L. (2009). *Games for a better life: Effects of playing Wii games on the well-being of seniors in a long-term care facility*. Retrieved from <https://dl.acm.org/citation.cfm?id=1746055>
- Kalhbaugh, P. E., Sperandio, A. J., Carlson, A. L., & Hauselt, J. (2011, December 16). *Effects of playing Wii on well-being in the elderly: Physical activity, loneliness, and mood*. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/01924788.2011.625218>
- Donnelly, L. (2015). *Low levels of face-to-face social contact 'can double depression risk'*. Retrieved from <https://www.telegraph.co.uk/news/health/news/11912255/Low-levels-of-face-to-face-social-contact-can-double-depression-risk.html>
- Texas A&M University. (2016, July 15). Health benefits of Pokémon Go. *ScienceDaily*. Retrieved July 9, 2018 from [www.sciencedaily.com/releases/2016/07/160715181715.htm](http://www.sciencedaily.com/releases/2016/07/160715181715.htm)