



VOICES

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Voices 21

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TRAUMA & PERCEPTIONS

Alyazia Alblooshi

Trauma and Perceptions of Time in Silver in the Wood, The Monster of Elendhaven, and Prosper's Demon

This paper deals with representations of time in Emily Tesh's *Silver in the Wood*, Jennifer Giesbrecht's *The Monster of Elendhaven*, and K.J. Parker's *Prosper's Demon*. I have selected these texts because they explore the idea of how time plays a role in revenge plots. I shall argue that characters' perceptions of time are affected by their trauma.

All the novellas I selected are from the fantasy genre, bearing similarities and differences, but having in common the theme of revenge. For the sake of this paper, 'revenge' does not necessarily mean that the affected character is the one who enacts the revenge, but the narrative itself is concerned with balancing the scales and solving injustices. In my reading of the texts I felt that the main characters experience time differently from the rest of the characters, and that the setting of the text parallels this perception of time. While time in literary terms is half the setting, the other half is the 'space' in which the narrative takes place. I find a similar pattern in the novellas I selected in the sense they are of the fantasy genre and the setting seems to alter or accommodate the characters' emotions. Time is an obscure subject, an abstract, and in all the novellas I find that time is uniquely shaped to fit the perceptions of the 'wronged' character. A relevant term in exploring the characters' perceptions of time is that of "temporal perspective" which is defined as the person's thoughts or attitude towards the present, past, and future (Levine). According to the lecture, temporal perspective is a scale and it includes orientations towards the past, present, and future with regards to positive and negative attitudes. This scale will be used to describe and differentiate the character's perceptions of time in this paper.

The first example of a narrative's time being tailored to the perceptions of the main character is *Silver in the Wood*, the first novella in Emily Tesh's *The Greenhollow Duology* and it explores a fantasy setting featured around the Green Man folklore. The main character, Tobias Finch, plays two roles: the Wild Man of the Woods, the mythical protector of the forest and the villagers, and Tobias, the human who has long outlived his lifespan. Throughout the novella, the text reveals to the readers Tobias's slowed perception of time along with descriptions of how the woods appear according to his perception. For example, when Tobias gets injured in the first part of the book, "Time went slow around him, heavy and green after the way of the trees," (Tesh). There is a combination of both 'time' and 'space' transforming in Tobias's perception, slow and 'green.' His description of time is an unusual one, as time is not often described with the use of color. This synesthetic perception suggests the uniqueness of Tobias's tracking of time. He does not rely on "clock time" or even "event time" because where he lives in the wood there is no clock or any social events to track time with (Levine). A few lines after, Tobias describes the passing of days as "The slow green time carried on . . . the pain of the wound felt distant through it," until another character intrudes and there is a change in the speed of time, in which it "would not slow with another person here," suggesting that the wood's power to slow time is only perceived by Tobias (Tesh). Since the narrative is written from Tobias's point of view, I assume the perception of time in the woods is Tobias's own reflected due to his strong connection to the woods and him being the Wild Man. Whenever Tobias is in pain or in distress, not only does the wood slow time but it is personified, and it displays emotion. For example, when the text reads "Time has softened around him the way it so often did. Maybe that was the wood's version of pity." In order to understand the reasoning behind Tobias's temporal perspective, it is important to remember that he is the Wild Man of the Wood, a monstrous fairytale-like figure in the narrative. Monsters are defined as uncategorizable creatures that exist outside the boundaries of definite labels, which means their existence is abnormal

according to humans, and they typically reside in thresholds and places of liminality. An example is the woods, which is set at “the far limits of civilization” (Nuzum 207). The main difference between Tobias and the regular human characters in *Silver in the Wood* and the base of his similarity to the category of a monster is his experience of temporal reality. Temporal reality differs from temporal perspective in the sense that temporal reality is a classification of categories of time perceptions. In Nuzum’s definition, temporal realities are three: linear time, mythic time, and liminal time. Linear time is based on a sequence, meaning it involves a beginning and an end. Mythic time is synonymous with “event time” and “social time” as the passing of time is measured by rituals or events (208). Liminal time is a transitional period in which people are separated from the normal time flow. Monsters do not experience linear time, which is exclusive to human perception. They experience mythic time and liminal time, and by that definition, Tobias is a monster.

The novella features flashbacks in which Tobias’s memories of the past with the villain are explained. Four-hundred years ago, Tobias and Fabian were friends, but things change when Fabian kills their other friends and becomes the “Lord of Summer.” Fabian hits Tobias on the head and he loses consciousness, and when he regains it and wakes up, he describes time as ‘heavy’ and ‘green,’ which characterizes this scene as the moment he realizes that he has become the Wild Man of the Wood. Since then, Tobias tracks time through the passing of summers. Here Tobias loses the ability to track linear time, and is restricted to mythic time, as in the tracking time through the passing of the summer seasons and liminal time, a time outside of human community, in the boundary of the woods.

In the second part of the novella, at the beginning of the climax, Tobias faces Fabian, who is the source of his emotional trauma, in the summer season. He must cut down the oldest oak tree of the forest, where he built his cottage near and where he feels the strongest connection. Because both Tobias and Fabian are both connected to the tree, it is a difficult decision to make. In Tobias’s point of view, “the time

of the wood ran deepest here beneath the oak” (Tesh). Not only does Tobias personify time in the wood, but he pinpoints the source of all time beneath the oak tree, as if the heart of time and Tobias and Fabian are all combined in its roots.

Since the very beginning, the pace of the story has been slow and events happen gradually, but when the oak tree was cut down the pace of time quickened, as if to reflect the quick progression of events after the initial shock was over. Tobias, in order to resolve the climax and finally defeat Fabian, thought that “he’d outlived his right to be in the world long ago,” as a reasoning to bring down the heart of the wood’s time and sever his connection to the Wild Man of the Woods role. When the oak tree came down and nothing but the stump was left, Tobias compared himself to it in that it was “no more dead than Tobias was, living in all he had shaped and was a part of,” as if both the oak tree and Tobias were in a way inseparable and that the difficulty in bringing down the tree and uprooting it was that Tobias would be uprooting himself as well, after four-hundred years outliving his human lifespan. It would mean that he must sever his connection to the woods that altered time for him. In other words, accept death, or change.

The moment the tree fell down, “Time suddenly dashed forward like a flooding stream again,” a description in contrast to the slow green growth of time before the fall. After defeating Fabian, the description of the passage of time and the changing of seasons was only in one sentence. Tobias loses his connection to the woods and becomes human, again, experiencing life as a human for the first time in four-hundred years quickly, in contrast to the slow-paced liminal time of the woods. He travels out of the woods and is introduced to cities, where time flows like a stream and events happen sequentially. After four-hundred years in a liminal space, this change impacts his perception in that he starts collecting tangible objects to mark his memories, like souvenirs from his travels, described as “things of this world and of this time, human right through” (Tesh). Other than the change in his temporal realities, he also experiences change physically. When he was the Wild Man, cutting his

hair would result in it transforming into twigs, but as he cuts his hair now, it falls as lumps of human hair do. Healing from the trauma caused by Fabian allowed him to perceive time as humans would, and that was an indication of him uprooting himself from the past as he had uprooted the oak tree. He moves on from the primitive practices of the past into the new ways of the present, the modern world. Tobias's altered perceptions of time were brought on by two simultaneous past traumatic events: one, Fabian's betrayal and his prolonged four centuries of abuse; the other, Tobias's transformation into the Wild Man, a monster.

The second novella discussed in this paper is *The Monster of Elendhaven* by Jennifer Giesbrecht. Similar to Tesh's *Silver in the Wood*, Giesbrecht's novella revolves around the theme of balancing the scales of injustice, but the resolution is not as clear as uprooting the source of trauma like in Tobias's narrative. In *The Monster of Elendhaven*, the character discussed in this paper is Florian Leickenbloom, the lone survivor from the oldest noble family in the city of Elendhaven. The setting of the novella is dark and grim, the city parallels Florian's stagnated perceptions of time. In the seventh chapter, characters discuss the rumoured apocalypse that will eventually start in the city. Florian interjects and claims that the apocalypse has already started, and another character describes it as a "leisurely apocalypse . . . if it takes five hundred years" (Giesbrecht ch. 7). Florian then responds with "It's only leisurely if you are tracking time on a calendar," reinforcing the notion that different characters track time uniquely. According to temporal perspectives, on the aforementioned scale Florian overlaps between two points: "past negative" and "future" (Levine). Past negative describes an attitude of the past concerned with feelings of negativity and pessimism, often with guilt, remorse and vengeance intertwined. Florian displays that in this he is stuck in his tragedy, unable to move on without finding justice. The "future" orientation is concerned with achieving a planned long-term goal, which Florian does throughout the novella.

Since the novella is written from the point of view of the other main character, Johann, descriptions of Florian's manor fits with Johann's

perception of Florian. Here there is a connection between the ‘space’ and ‘time’ elements of the setting. When setting foot in the manor, a dusty ancient place wrapped in sailcloth, unused for living, he wonders “if Florian was a man with troubled thoughts; memories that required caging, held still and quiet in the palm of the hand” (Giesbrecht ch. 2). When asked what would he do with great power, Florian answers “What else but put all cheques in balance.” Then later in the story, Johann discovers Florian’s plan to take revenge on Elendhaven’s elites by creating a magical plague after years of meticulous planning.

It could be argued that Elendhaven is a monster in that linear time is seldom described in the text, and that most instances of time description lean towards that of liminal time. Since the liminal aspect of liminal time is concerned with the transitional and the existence of a time-period out of the norm, Florian’s liminal perception of time is a parallel to that of Elendhaven’s in how Tobias’s time-parallel is in the woods. In a way, Florian does not experience linear time as much as he experiences “event time” that is characterized by the events of his childhood tragedy, and his “future” orientation which is characterized by his end goal of revenge.

Florian describes himself with the imagery of something “trapped in ice,” an object that has been frozen in time (Giesbrecht ch. 3). In the narrative’s folklore, there is the myth of a “hallankind,” a person sent from Elendhaven’s sea to avenge a wronged child. From the onset of the novella, it is hinted that Johann was sent from the sea to help avenge Florian, but when asked about it, Florian dismisses it and muses that Johann would’ve been “a perfect and unexpected gift for the child that never grew old.” (ch. 4). In my reading, I’ve understood Tobias’s wood as a personification of a companion, helpful when in need but not imposing, but when it comes to Florian and Elendhaven, the city is presented as an avenging mother-like figure. To Florian who feels as if he never had the chance to grow up, he finds comfort in Elendhaven’s similarly stagnated flow of time.

In the story, the city is located at the edge of the Earth, far up north

where the sun rarely shines and the skies are perpetually dark. This causes the characters to compare it to a shackled being, dragging itself and the people living in it through time slowly. A foreign character discusses the difference between their culture's belief in time and Elendhaven's in that according to them, time is like a wheel, turning around itself and having a circular motion, and according to her it reflects the idea that "Everything that has happened has already happened, and will happen again." (ch. 7). Her quote furthers the idea of repetition, of cyclical time. Cyclical time, or circular time, is the opposite of linear time which is measured in recurring cycles like the change of seasons for example. What is described in the quote above is also similar to "eternal recurrence," the philosophical idea coined by Nietzsche which revolves around "the notion that everything recurs eternally in identical fashion" (Nietzsche 18). Nietzsche's eternal recurrence will be detailed later on in this paper when discussing Prosper's Demon.

Returning to *The Monster of Elendhaven*, flashbacks occur with Florian's point of view. One flashback is from fifteen years ago, when a plague strikes Florian's family and they were barricaded inside the manor without help and had their wealth stolen by Elendhaven's elites. In the novella's time frame, Florian re-creates this plague with magic and infects the elites with it, as revenge. 'Time' in the text is reflected through Florian's vengeance, his inability to grow up as a happy child, and the plague apocalypse that redeems Elendhaven. After Florian dies in the pursuit of his revenge, Johann leaves Elendhaven after the spread of the plague and there is no longer any mention of the passage of time in the remainder of the novel. Florian's dilemma with his past and his perception of time matches the quote "Man's misfortune lies in his being time-bound," (Miller 92). To Florian, who has felt the flow of time like slow decay, there will never be enough time to redeem the people who've wronged him.

Comparisons can be drawn between Florian and Tobias. The first element of comparison would be their ages: Florian is thirty and Tobias is a little above four-hundred years old. Tobias sees time reflected in the

natural elements during the passage of four-hundred years. For example, the changes in the nature surrounding him like that of the growth and death of plants and the cycle of the seasons in the woods. Florian, on the other hand, lives through three decades but observes change in the man-made world. His perception on the change of times leans towards concepts of industrial change, and the cycles of life surrounding him are human lifespans.

In both *Silver in the Wood* and *The Monster of Elendhaven*, myth and folklore play important roles as they explain the worlds created in the text, and give the characters a sort of mirror in which we, the readers, see reflections of Florian and Tobias in their settings, mythology, and folktales. Nikolajeva summarizes both themes from these novellas in the quote, “fantasy literature owes its origins mostly to Romanticism with its interest in folk tradition . . . and its idealization of the child” (Nikolajeva 139). I would say that Nikolajeva’s concept of the “idealization of the child” fits better in Florian’s context rather than Tobias’s. In accordance to Erikson’s stages of development, Florian has not been given the appropriate environment or care to grow up in the earlier stages of development. To him growing up was something not accounted for in his revenge plan. In order for him to have the motivation to continue, trapping himself in the past was necessary to carry on. This has put a pause on his social development, and in one scene between Johann and Florian, Johann believes that if Florian still had servants “he’d treated the help poorly as a child . . . Surely he was just as rude and puffed up then, all self-righteous” (Giesbrecht ch. 7). The Romantic ideal of a child while explored through the revenge plot of a traumatized character does not read as “ideal.”

Furthermore, Tobias does not fulfill all the stages as well, but instead of being stuck in the earlier childhood stage of development, his development seems to pause at the young adulthood stage. I find this relevant because at this stage the example given in the article is “Individual forms, close friendships, or long-term partnership” (Lewis and Orenstein 2). Furthermore, Tobias had been betrayed by his friend,

left isolated and abused for four centuries, thus damaging any friendships or ways of social development. What could be contrasted between the two is that while Florian's narrative did not balance the scales of injustice, Tobias's did, and thus he was given the chance to complete his developmental stages, although extremely late. In my opinion, the inability to find justice and heal from trauma will discontinue a character's developmental stages even if they are aging, and I find this the case with Tobias and Florian.

The third novella in my paper differs from the previous two in many ways. *Prosper's Demon* by K.J. Parker features a nameless protagonist who is a demon hunter. His story begins before he was born, specifically in his mother's womb. There he meets a demon and unknowingly performs his first demon exorcism. After birth, he dedicates his life to hunt down the demon he met pre-birth. In one of the flashbacks, his nemesis kills his sister's baby, and from then on the protagonist pledges to take revenge every time he meets the demon. The demons in this text do not die and cannot procreate. When pondering over the limitations of the human lifespan, in contrast to the limitless lifespan of a demon, the protagonist approaches the conclusion to this observation in a nihilistic point of view, displaying a "now-or-never" attitude. He directly addresses this issue in that he says "the best we can honestly hope for is that one empty, meaningless day will follow another without things getting actively worse" (Parker). Later on he rhetorically asks the reader how can worthwhile actions be achieved when there is a time limit.

According to temporal perspectives, the protagonist would fall on the "present hedonistic" orientation of the scale, which is defined by a nihilist approach towards time (Levine). Evidence of his hedonism is that he approaches events in his life according to what is painful and pleasing, and part of what is pleasing to him is inflicting pain on demons. The core relationship explored in this novella is that between the protagonist and the demon he meets in his mother's womb. There are many instances where the two characters meet again during the course of the protagonist's life and the same sequence of actions occurs: the

protagonist recognizes that the demon has possessed a host, he evicts the demon from the host, the demon flees, and then it is a repeating cycle of revenge. Nietzsche's concept of "eternal recurrence" is relevant here in that the cycle of interaction between the two characters starts almost identically, where the demon upon recognizing the protagonist says, "You again," (Parker) three times in the course of the novella.

There are two main different perceptions of time in *Prosper's Demon*. There is the protagonist's linear and mythic time, and the demons' liminal time. The protagonist, himself, describes this as "The only real difference is duration" (Parker). By duration he means the duration of their lifespans, and a recurring concept throughout the novella is the meaninglessness of time in a human's lifespan, and the inability to think in the long-term. There is dialogue between the demons and the protagonist, in which the demons argue that his plans to stop them or kill them are entirely worthless, as they would just repeat the same process after his death. In one scene of introspection the protagonist says, "Only two things live forever, the instruments of darkness and works of genius." The text upholds the idea of three dichotomies: mortality and immortality, human and demon, and now or never. The demons do not care if they are thwarted by the protagonist, as they will redo what has been undone, but to them the protagonist is merely an annoyance, and they would rather not deal with him. To the demons, their temporal perspective is oriented in the "future transcendental," in that they are focused on the future "beyond death" (Levine). The demons experience only liminal time, and they believe in cyclical time as well, in that what has happened will keep recurring in an identical pattern.

Interestingly, the protagonist's only experience of liminal time happens when he meets one of the demons in his mother's womb. The womb here is the liminal space, the boundary outside of human civilization that allows time to flow differently. There is a similar concept to this in Giesbrecht's *The Monster of Elendhaven* in which the city is "a womb, not a shroud," in which monsters "sleep inside" (Giesbrecht ch. 5). The element of fantasy here is that the protagonist has memory

of his time in the womb, and that the mother's womb, a liminal space, is where monsters and demons live, and the human protagonist can experience time similar to the non-human characters. In the other novellas the liminal settings were not temporarily places of experience, whereas the protagonist of *Prosper's Demon* only experiences liminal time temporarily in the womb, but after he is born there is no further connection to it. Miller discusses time with regards to the 'space' in which it occurs. Miller writes, "human temporality is experienced as some form of spatial movement – how space transforms into time" (96). In the line which follows, time is defined as a multiple perspective experience.

Unlike Florian and Tobias who are stuck in the past and unable to move on, the protagonist is perpetually in the present and has no thoughts of the future or past. Where Tobias's trauma made his perception of time slow, like the growth of a tree, and Florian's made him feel frozen in the past like a thing trapped in ice, the protagonist of *Prosper's Demon* articulates his perception after the traumatizing event of his sister's baby dying in the quote, "Some people are galvanized into decisive action by a crisis. I get all fogged up, like a cart stuck in the soft ground; the wheels turn and turn, but no traction" (Parker). The protagonist experiences time post-trauma as cyclical, recurring, in a way similar to the demon's perspective and Nietzsche's "eternal recurrence." His reaction to trauma and his way of coping with it is to think about art. In the last third of the novella he asks a possessed artist, "What do you believe . . . is the greatest force for good in the world?" and the demon-possessed artist replies, "Art." This is significant because the protagonist uses this demon's end-goal which was to create the biggest bronze horse sculpture to kill its host and his nemesis, another demon, together in an explosion of bronze shrapnel. In the aftermath of this mass-demon eviction the protagonist muses on that the greatest force of goodness that will live on after his death is art, and "especially Art filled with high explosives." Nietzsche says in response to the way he countered the pessimism that stemmed from his thoughts of eternal recurrence is, "I

do not want life again. How did I endure it? Creating,” (Nietzsche 19), meaning that in order to not succumb to negativity from the identical cycle of time, he endures it through creating, or highly explosive art in the protagonist’s case.

Psychologically, research in altered time perceptions due to post-traumatic stress disorder is not confirmed, but according to psychologists study on traumatized individuals who do have an affected perception of time, the disorder is not necessarily the causation of the altered time perception (Vicario and Felmingham). Another psychologist researches the effects of trauma on memories, and of an individual’s relationship to time. Saltzman discusses flashbacks and re-experiencing time in regard to trauma depicted in literature. Saltzman claims that “Memory, more generally, plays an important role in orienting humans to time,” and affects attitudes or orientations to the past, present, and future (Saltzman 664).

The novellas I chose to analyze in this paper all display characters which have been through traumatizing events and have had their perception of time affected by those memories. Adding to that, the setting of the novellas is affected as well, because time exists within a space, and when the space is affected, so does the time that flows in it. Tobias, Florian, and the protagonist of *Prosper’s Demon* are characters which cope with their trauma differently, but ultimately have skewed perceptions of time.

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DREAMS & TEARS

Wadeema Alameri

One note. It was only a single note that pulled her attention towards him. A young boy sitting on a chair in front of a huge piano that made him look tiny. Small and trembling hands, yet very calm, tapping the keys of the piano.

Emma was thirteen, a girl who never thought that music would spark an interest within her. She was amazed at how easily he tugged on the strings of her heart, motivating her to play piano like him. The whole audience was entranced by his play.

As soon as his play ended, she quickly ran outside looking for him. She searched for him everywhere, and could not find him. She became quite sad about the fact that she could not ask about his name. She had not seen him at her school before. During lunch break, she heard a faint piano being played in the music clubroom. She rushed to the clubroom recalling the moment at the stadium when she was enthralled by the play.

There, she saw the same boy sitting on a wooden chair, playing the piano. Emma was so happy and excited to finally meet him. She immediately asked for his name

when he stopped playing.

“Edward,” he said.

His voice echoed in her head, different than what she imagined. Emma told him that she’d been mesmerized by his play at the stadium and that she had been motivated by him to play the piano too. Edward stood there not sure what to say. Emma received no reply from him, but still she insisted on him teaching her how to play the piano like him. Edward could not decline her request and decided to change his schedule a little to teach her.

A few years later, both of them were in high school. Emma had learned a lot of stuff about Edward, his likes and dislikes, and his favorite pieces to play. He taught Emma many things about music. He seemed to be so in love with it. She also learned about his mom, who had taught him how to play. It wasn’t her thing, but as soon as Edward’s fingers fell upon the keys, he became enthralled. In a short time, it had become his favorite hobby.

Edward went to many competitions to improve his skills, and won so many prizes. By then, every pianist in his city knew his name, and people called him a genius. He was capable of playing

hard classical pieces such as Fantaisie Impromptu by Chopin and Moonlight Sonata by Beethoven. Edward wanted to increase his fame and aim for higher places, to become popular worldwide. Other pianists who lived in the same city as Edward knew that he was capable of achieving his dream.

Emma went to visit him, but he barely met her as he was buried in practice. This gave Emma a feeling of sadness. She didn't like to see Edward fading away from her all over again. However, she always wanted the best for him, so instead of sulking she also went to play piano.

But then, while she was playing her piano, she got a call from Edward's mom. Upon hearing the news, Emma rushed to the hospital.

As she reached the hospital, her heart was beating like drums in her ears. She opened the door and saw Edward laying on the bed with bandages around his head. Her glance lingered sadly on Edward and then shifted to his mom. His mom was standing next to him with her face buried in her hands, crying. Emma felt her throat going dry fearing what she was about to hear.

Edward's mom noticed her appearance, and looked at her with a look that held such sorrow and sad feelings.

"What happened to Edward?" Emma

said, her voice shaking.

"I don't know how am I supposed to tell you, Emma."

Emma approached Edward's mom slowly and repeated the question.

Eventually, Edward's mom said, "The doctor said that the accident mainly affected his head. He's lost his ability to hear. He's become deaf." His mom said while stuttering and crying.

Upon hearing this, Emma recalled the conversation she had with Edward.

"Hey Edward, what is your dream?" Emma asked as she was looking at him.

"I want my music to reach to every corner of the world." He said, looking determined. Emma felt a little bit shocked by this, and tried to laugh it off.

"How did you come up with a dream like that?" Emma asked curiously

"In the beginning, playing the piano was just a hobby. But when I tried to compete with other pianists and won most of the competitions, this gave me a thrill," he said, as he was doing a gesture of playing the piano. "And soon I realized this became my passion, and I wanted to become a well-known pianist."

She knew this hearing loss would affect Edward so much since he lost his goal in life. She was afraid of him waking up and realizing his state. She did not want to see him break and suffer upon

knowing that he was not able to go after his dream anymore. This made Emma very concerned about his health, and she wished he would not regain conscious for now.

AS EDWARD WAS ON his way back from school, he tried to pull the piano sheet from the bag. Soon, he noticed a child walking carelessly on the road not paying attention to the car that was coming his way fast. When Edward saw this, his body acted on its own as he reached to the kid in a blink of an eye and pushed her away. However, this caused him to be the victim of the accident. He felt the car bump into his arm as he fell down and hit his head hard on the road.

His mind felt as if it was floating in the air when he hit the ground. The last thing he remembered was the face of the kid crying in front of him.

Slowly, Edward regained his conscious. His head was not healed yet from the accident. His eyes landed on an unfamiliar ceiling. He tried to figure out where he was. Then, after a while he realized it. His eyes shifted on his mom and Emma who were sitting on chairs a little away from him. He saw his mom's eyes sparkle when she noticed him regaining his conscious. Then he saw Emma looking at him with a happy yet very sad expression.

He wanted to sit up, but he was stopped by his mom. It soon hit him when his mom handed him a glass of water. He said he was thirsty, but he was not able to hear it.

His eyes shot up to his mom, looking at her with fear, hoping for some clarification about his situation. His mom mouthed out, "Do not worry, you will be okay." He read it, but he was not able to listen to it. He realized that his dream was all in vain. All those years of playing piano and going to competitions to be even better were wasted. He felt so empty and sad at the same time. He pulled the blanket over himself and turned away.

Emma stood there looking at Edward, realizing his situation. She felt as if she was paralyzed, unable to do anything for Edward. She saw his expression deadpanning and smiling a little bit. Deep down, she knew he was slowly breaking, and she had to do something before things spiralled out of control. However, she could not think of anything to comfort him. She saw the blanket shaking and knew he was crying.

Edward felt so hopeless about this. There was no cure for his situation. More importantly, he wouldn't be able to hear the piano again. The passion he had been spending most of his time on, some sort of obsession to him, had been snatched

away in an instant. The sadness and the depression consumed his soul. He stopped talking to everyone. It seemed as if he was in his own world. His mind was not present. He was always staring at nothingness.

Emma noticed this change within him. It was like he was there sitting in front of her, but at the same time not. Her feelings for Edward did not change; they increased even more. She was determined to show him that life was not over. At the same time, she wanted to return the favor of spending time together, even though he'd practiced most of that time. She wanted to show him that she was thankful for everything he did for her, but she did not want to see him like this. It broke her heart to see him looking like a corpse. She grabbed a note book from her bag and started to write for him.

"Hey, how are you feeling?" She waved the notebook in front of his face.

He noticed it and read what she'd written, but he didn't say anything. Instead his gaze shifted somewhere else, another kind of nothing.

Emma felt bad for asking that question and re-wrote it again. "I'm sorry. I shouldn't have asked that. I just want to tell you that life is not over. You can find other hobbies."

He read the note, and still, she received

no response from him.

"What can I do to help you overcome your loss?" she wrote desperately.

When she did not receive anything from him, she gave up and left the notebook on the table in case he changed his mind and wrote back.

Edward noticed her change in mood when she left the room. He sighed and took the notebook and wrote his answer in it, then went back to sleep. He knew the thing he'd asked for was impossible for Emma, but he just did not want any company at that time.

EMMA RETURNED TO THE

room to take her bag and leave. She took a glance at him, and rushed to the notebook when she saw it on his bed. She read what was written, and she was completely shocked at his request.

"Go and win the competition instead of me," was his reply.

She felt overwhelmed by his request. She was not as good as Edward, and she knew she would lose in the first round. But if this was going to help him overcome his loss, Emma wouldn't mind enrolling. She just wanted to see him lively again. She registered her name in the competition, even there were only five days until the competition. Still, she didn't mind. Now it was her turn to practice for

Edward's sake.

Meanwhile, Edward felt Emma's absence during those days. He worried about the fact that she may actually compete. If it was true, why would she go so far for him, knowing that she would lose? He took the notebook and read what she wrote again.

"I just want to tell you that life is not over. You can find other hobbies." His finger grazed the paper, specially on these words. He brushed off the feelings and remembered that it was only one day before the competition.

Two weeks later, he was discharged, but still he didn't see her. He felt lonely without her; she used to be with him most of the time. She had a place in his heart, and he was worried about her. He wanted to get rid off of anything that reminded him of piano, and he did so. Emma's words left an impact him. His life had not ended just because he couldn't play piano anymore. A few weeks passed, but still there was no sign of Emma. He waited patiently for her to come back.

After a few more weeks, she showed up at his home, looking depressed and sad. Edward felt happy to see her, and he knew the reason for her sad look. She told him that she was not even able to win the first round. After all, she was not as skilled as he was. He grabbed her

notebook and wrote, "I am sorry." Then he flipped back to the page where she wrote that life would not end if you are not able to achieve your dream, and pointed at this. He felt grateful for Emma's words.

When Emma saw this, she realized that he had finally overcome and accepted his situation.

PATRIARCHY & FEMINISM

Khadija Boulanour

The *Last Duchess* by Robert Browning was published in 1842 and has 11 stanzas and follows the basic rhyme scheme of aa-bb-cc. The poem follows a Duke (possibly the Duke of Ferrara) describing his last wife to an envoy from a Count whom the Duke hopes will become his future father-in-law. The poem showcases numerous language features including imagery, metaphor and analogy. The general theme is patriarchal dominance of women in the 19th century, which runs parallel to the feminism movement of the time. The feminism movement was a trend in literature and across society which highlighted the social ills towards women, and was aimed to win women basic rights, such as voting. This essay analyzes the threads of the poem's theme to understand its linguistic features and underlying feminist meaning.

The poem opens with the Duke inviting the envoy to look at a painting of 'my last Duchess... looking as if she were alive... [with a] passion[ate]... earnest glance,' indicating to the reader that the Duchess is no longer alive, and that her image is a striking one. The imagery of the life-like painting piques the reader's

interest, as we now consider the Duke's attitude towards his Duchess. Does he observe the vivid painting with sadness or with guilt? The Duke reveals the painting is usually hidden behind a curtain that 'none puts by... but I,' showing that the Duke maintains sole control over its display. The curtain acts as a metaphor for the Duke's desire to maintain authority over his late wife and who can see the painting, and perhaps even what the painting can see itself.

Now that the poem is focused on the picture, the Duke goes on describing the image, saying (using assonance with the letter 'o') that there is 'such a glance... [a] spot of joy on the Duchess' cheeks' triggered, the Duke claims, by the painter's easy complements, adding that the late Duchess was 'too easily impressed.' Evidently, the Duke is not happy with his wife's attitude, and as he continues to describe her his tone is slightly disapproving. He says the Duchess would scatter smiles and 'approving speech' among the residents of their land, even cheerfully chatting with 'some officious fool' who only brought her a 'bough of cherries.' This

example reinforces the fact that the Duke is jealous and desires control over the Duchess. The theme is strongly depicted in the Duke's behaviour; the typical attitude of a privileged man of 19th century England, believing his wife was his to own to dominate (and indeed in the eyes of the law, wives were their husband's chattel). This flawed standpoint on women helped kickstart the fight for women's right to vote and the first wave of the feminist movement.

The irony of the disparaging comments embedded in the verses above strengthen the argument that the Duke himself is a jealous and arrogant person. The very characteristics that he criticizes in the Duchess make her seem a refreshing beacon of light (in stark contrast to her unpleasant husband). The Duke believes she 'rank[s] my gift of a nine-hundred-years-old name with anybody's gift' and is 'disgusted' by such equality. Here the tone of the poem shifts and the theme opens up, showing that the true source of the disgusting inequality in their marriage is the envious, egotistical nature of the Duke. This core element of the poem's theme is also tightly intertwined with the feminist movement.

In the ninth stanza the poet uses alliteration and an analogy to begin the conclusion of the poem, explaining

the fate of the Duchess. As the Duke says, 'I gave commands; then all smiles stopped altogether. There she stands as if alive.' The 's' alliteration runs through these lines in the stanza, tying together the Duke's 'commands.' The result of his commands and the only thing that is now left of the Duchess is her painting. The Duke's repetition of his initial statement about the realistic look of the picture implicitly explains why he feels uncomfortable with the painting and likes to have a curtain drawn across it. In his wife's image, lies an analogy showing that although she had been brutally killed by her husband, she appears alive in the painting and haunts the Duke in his life because her soul, even in death, is more alive than his will ever be.

In conclusion, *My Last Duchess* tells the story of a dangerously arrogant Duke who is haunted by a painting of his late wife, whom he murdered. The poet uses features such as alliteration, irony and imagery to carry the theme of the poem. Additionally, in keeping with the feminist movement at the time, the poem shows that despite the suffocating effects of the theme of a patriarchal marriage and society, the Duchess' true strength lies in her kind treatment of those around her, and in the bright legacy that lives on even after her death.



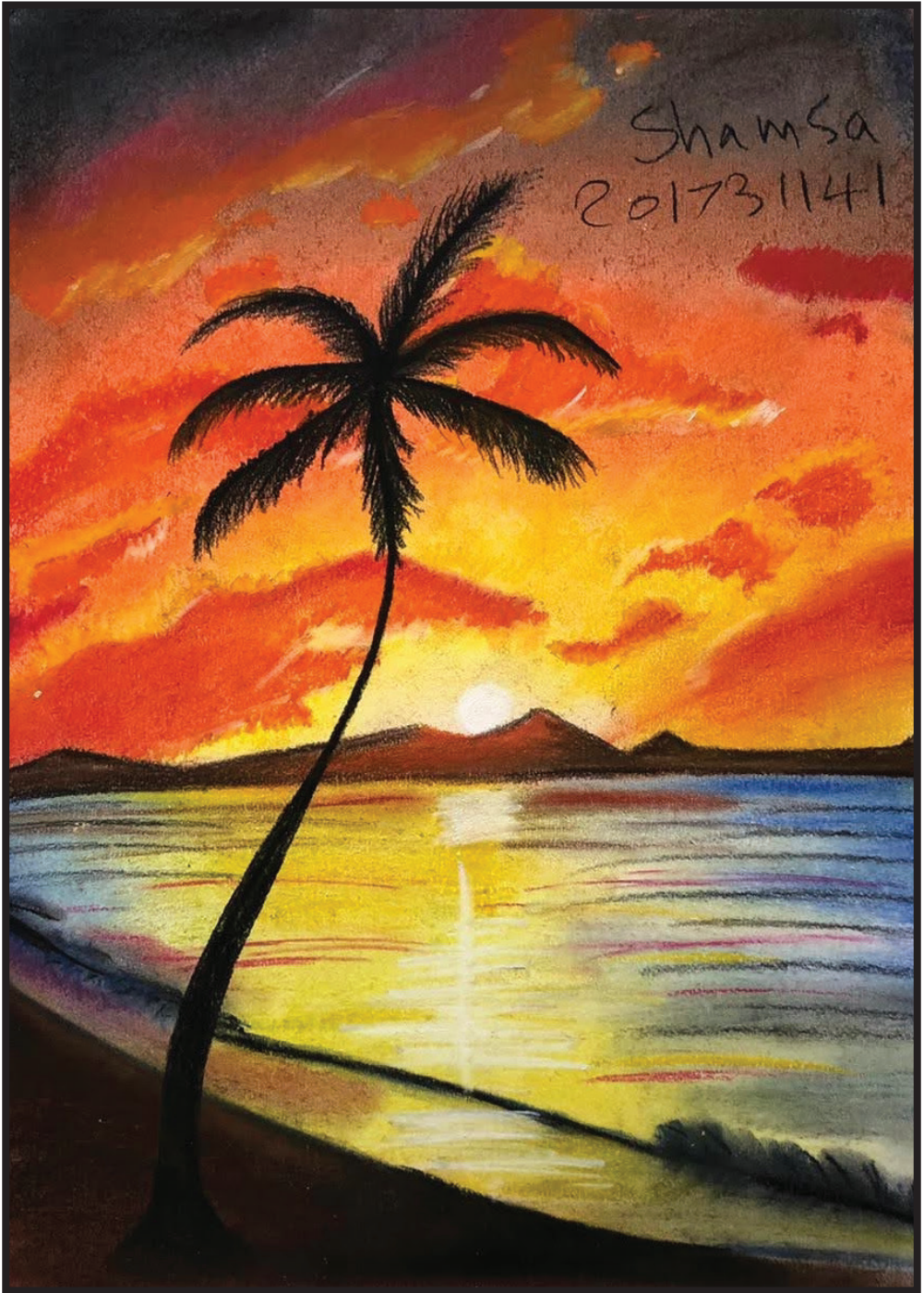
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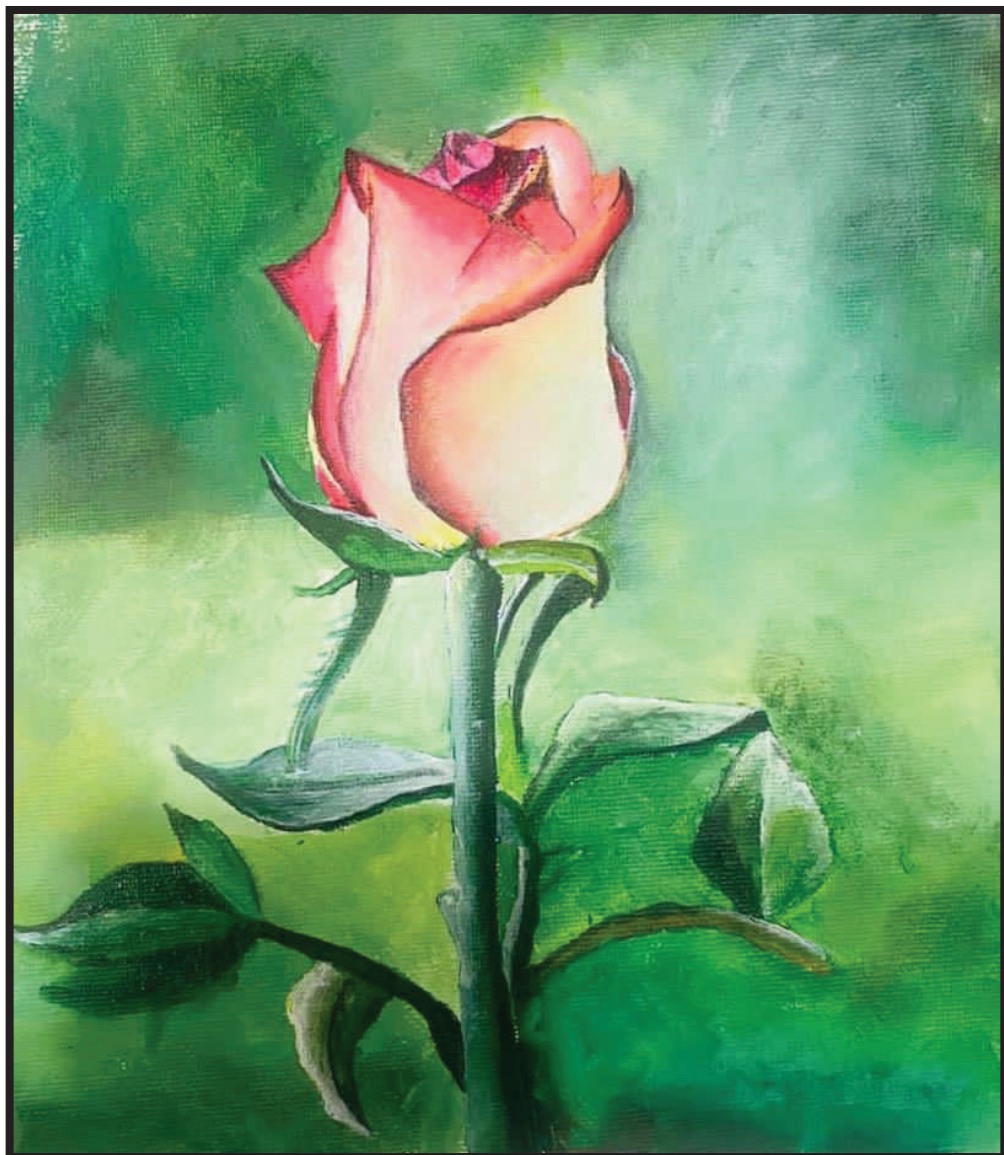
Belaqis Al Senani



Eiman



Shamsa



Meera Salem Khalfan Alshamsi



Moza Ghair Abdulla Alromaithi



Fatima AlMazrouei



Hind Al Shamsi

THE SICK ROSE

Mariam Alghfeli

The Sick Rose is a symbolic poem written by the English poet William Blake in 1794. The poem was written during the Romantic era and exhibits characteristics of this period, like emotions, feelings, imagination, and nature. In two short stanzas, Blake uses symbolism, such as the rose and the worm, to create a visual image of two contrasting themes. Roses are usually associated with love, beauty, and purity, whereas the worm represents evil, sin, and destruction. In this essay, I argue that the sick rose and the worm symbolize a love destroyed by a secret affair.

The poem begins when Blake mourns the state of the sick rose. The rose, which was once a symbol of romantic love and beauty, is now ill due to the worm's malignant nature. The worm is described as "invisible" when it "flies in the night." This has dark connotations suggesting that the damage to the rose is secretly done at night when people feel lonely, vulnerable, and are more likely to sin. Moreover, the worm's invisibility suggests that the rose is unaware of the worm's existence or the threat that its presence brings. The poet's use of onomatopoeia in "the howling storm" further fuels this sense of destruction and turmoil caused by the worm. This stanza introduces the worm as an evil creature that has disrupted the rose's beauty, resulting in its illness, which acts as a metaphor for its damage to this beautiful love.

Blake also uses symbolism and imagery of the worm and the rose to illustrate how secrets and infidelity can ruin a relationship. The stanza begins with "has found out thy bed," a metaphor implying that the worm has embedded itself in the most intimate part of the relationship, which is the bed. The verb "found" suggests that the rose did not invite the worm; instead, it forced its presence on the rose. Furthermore, the juxtaposition of the color "crimson" (usually linked with blood and death) with the word "joy" highlights how something beautiful like

love can bring about a lot of pain. The poem then ends with “And his dark secret love, Does thy life destroy,” which solidifies the idea that the worm is a symbol of a secret affair that ruined the life of the rose or in the implied case of the relationship.

William Blake combined different literary devices like symbolism, imagery, metaphors, and juxtaposition to describe the rose and the worm, thereby leaving it open to several different interpretations. In this short essay, I discussed how the sick rose and the worm could be interpreted as a symbol for a secret affair that ruined a relationship. The poem implies that deceit and unfaithfulness, symbolized by the worm, are the cause of the rose’s sickness.



TRUST & CONTROL

Amna Hamad Alshamsi

Name: Juliette Binoche

DOB: 9 March 1964

Place of birth: Paris, Île-de-France

Occupation: Actress

“You have to be more intelligent”

Trust is the firm belief in the reliability, truth, or ability of someone or something. It is the most important thing. Most people in the world love to feel that others trust in their abilities. Trust is the foundation for any relationship. Without it, there are no healthy relationships that will work and they eventually fail. It helps to become the best version of yourself knowing someone truly trusts in your ability. Controlling less and trusting more is the key.

Actors face challenges to be better. Juliette Binoche is a French actress, artist, and dancer who used her ability to be what she is today. Binoche has faced an unhealthy relationship which now makes her more aware. Binoche believes that every actor has a choice to do unusual things. When it is created by you, it helps you explore yourself in a better way and that's attractive. Her aim is to show how important trust is in teamwork and to show how she dealt with misogyny. My aim is to clarify the details.

Binoche says, “It's much more interesting to work with trust than to work with, ‘I'm going to have control. I'm going to have the last word.’” She believes that films are teamwork and everyone has the ability to make a decision as an actor.

She has worked the director called Haneke, saying that he was the most controlling director she had ever worked with. He was very precise.

However, he really appreciated and respected the actors. Binoche believes that trying to please the director may destroy the moment, or not make it trustworthy.

One example was when she was trying to do something new, such as put her hand on a door knob in a different way. The director did not agree with that idea. However, in the end, she did what she wanted in her three free takes. That made the film special and it was very well received. She thought that every actor can use their power in the moment of acting to make a new, miraculous, and possible gift.

On the other hand, she mentioned another example about misogyny. Tom Cruise was working with Emmanuelle Béart who wanted some compassion for her role, "... but Cruise did not agree with that and started to control the scene," Binoche reported. Therefore, he was abusing his power to be selfish and he thought that he was better than her, according to Binoche.

Binoche believes that the work becomes interesting when the team members trust each other. It's a part of the process. She has proven this idea through her way of dealing with a controlling person like Tom Cruise and the director Haneke.

In my honest opinion, I truly agree with her and believe trust is a rare thing which helps to make a relationship healthy. Therefore, the best solution is to create more value and to be more intelligent to create a great film.

CHALLENGING RACISM

Alyazia Almuhammadi

On being brought from Africa to America is a poem written by Phillis Wheatley in 1768, and was influenced by the slavery movement that took place in America. The poem is about Wheatley's experience of being enslaved and kidnapped from Africa to America. The purpose of this poem is to challenge racism against black people. In this paper, I argue that all humans are equal and that there is no place for racism within religion.

All believers are capable of redemption because everyone is equal to God. At the beginning of the poem, Wheatley described her experience of being brought from her pagan land to America as being saved by God's grace. When she says, "That there's a God, that there's a Saviour too: Once I redemption neither sought nor knew," it indicates that everyone who believes in God shall be saved regardless of their skin color. Thus, there is no discrimination in religion. Everyone is equal and is capable of redemption, including black people.

Believers should not be racist because religion supports racial equality. In the last four lines of the poem, Wheatley writes

about how many people look down on black people just because of their skin color. She uses imagery when she says, "some view our race with scornful eye," to express the level of disrespect black people go through. She continued talking to the people, saying "Remember, Christians, negros, black as Cain, May be refin'd, and join th' angelic train." These two lines are used to prove that religion supports racial equality because of the story of Cain, a dark-skinned person who received God's mercy. Thus, the point that the poet wants us to understand is that if Cain was capable of salvation, then so are the rest of black people since, for God, everyone is equal.

In this short essay, I discussed the poem *On being brought from Africa to America* in regard to the theme that all humans are equal. This poem is divided into two parts, the first one is about how the poet is happy for being saved by God's mercy. The second part of the poem is directed towards racist people by reminding them that everyone is equal in the eyes of God.

WHEN IN KOREA

Reema Alneyadi Rauda Almbeiri Amna Al Dhaberi

AISHA

Finally, we're in Korea.

ANNA

We've been waiting for this for
a really long time.

AISHA

Oh no, Anna, we left the map
on the plane.

Anna and Aisha run back to the plane but find it closed.

AISHA

Great! The moment we landed
we lost the map! How are we
going to get to places not
knowing how to speak Korean?
We are doomed. We're lost here.

Anna laughs at Aisha for being dramatic, as always.

ANNA

It's fine. Aisha, don't panic. We're
going to ask someone here,
someone who knows the place
very well. Asking for a help is
always helpful in these situations.

AISHA

Wait a second, do you know
how to speak Korean?

ANNA

No, not at all. But I think we
can work things out.

Aisha and Anna see a small café nearby and go in to ask for help. As they
open the door, a whiff of fresh baked goods slaps their faces.

AISHA

Yuuuum, the smell is sooo
good.

Anna snaps her fingers in Aisha's face.

ANNA

Hello! We are supposed to ask
for help, remember?

AISHA

Sorry, sorry, who's going to talk?

ANNA

You, of course.

AISHA

No, I'm not. Why me? You go.
It's your idea.

ANNA

Uuh, who lost the map in the ...

ANNA (CONT.)

... first place, ha, Aisha? Remind me
again, please?

A Korean guy named Jihu sees them arguing about who is going to approach him first for help. So he saves them some time and goes to speak to them.

JIHU

안녕하세요!

annyeonghaseyo
(Hello!)

Aisha and Anna stand there awkwardly, not knowing how to react. Thankfully, the one thing they know in Korean is how to say hello.

ANNA & AISHA

Oh, annyeonghaseyo.

JIHU

도움이 필요한가요?

doum-I pil-yohangayo
(Do you need any help?)

ANNA

Umm, oh we need to get to the
train station please!

Anna makes weird facial expressions and hand gestures, mimicking a train driver pulling a whistle cord.

ANNA (CONT.)

Train, train ... CHOO-CHOO!

Jihu looks puzzled.

JIHU

차가 필요하세요?

chang pil-yohaseyo?

(you need a car?)

AISHA

No, no, a train station.

JIHU

Ahhh, train.

Jihu points to the street.

JIHU (CONT.)

**카페에서 나와 직진하시면
지하철이 있습니다.**

kapeeseo nawa jigjinhamyeon

jihacheol-I isseubnida

ANNA & AISHA

Oh, it's just here right around the
corner. Oh, my, thank you.

gamsahabnida!

Aisha and Anna leave the café smiling.

AISHA

Okay that was easy. He said just go
straight turn left and you will
find one of those underground
stations, right?

ANNA

Yeah, lets go!

Aisha and Anna walk the wrong way. Instead of going just straight, they take a left turn and go to the wrong train station.

ANNA

So we are here at the station.
What's the train's number again,
Aisha?

AISHA

Train number 5, arriving at
11:30 AM.

ANNA

It's currently 11:15 so only fifteen
minutes left. Great for someone who
didn't know their way. Not too bad,
we arrived on time.

Anna and Aisha sit on the bench waiting for their train, talking about how excited they are to visit jeonju, a historic building famous for Korean food, and they don't realize the time passing.

ANNA

It's 11:32. Why is the train not here
yet?

AISHA

Weird.

ANNA

I'm so confused it's supposed to be here at 11:30. Aisha, are we at the right station? Check the tickets.

AISHA

Oh, no, no, Anna! We are at the wrong station. This is station B4. We are supposed to be at station C2. We missed the train...

ANNA

Why is everything going wrong?! How are we going to go to the right one now? We don't know anyone, and we don't speak Korean.

Aisha and Anna stand there in silence, not knowing what to do, when Aisha hears from far away someone speaking on the phone in Arabic.

AISHA

Oh my, Anna, I hear someone talking in Arabic. Maybe they can help us, but I don't see them.

Aisha points to a woman down the platform.

ANNA

There! Aisha go to her.

AISHA

السلام عليكم

Hello.

SAMEERA

وعليكم السلام يا ابنتي

Hello, my daughter.

AISHA

آسفة على الإزعاج ولكنني في
حاجة ماسة للمساعدة وعندما
سمعتك تتحدثين باللغة العربية
هرعت لمحدثك

Sorry for bothering you, but I
need your help, and when I heard
you spoke Arabic, I rushed to
speak with you.

SAMEERA

حقاً! يبدو انها زيارتكم الأولى
لكوريا

Oh really! Looks like it's your first
trip to Korea.

AISHA

نعم انها كذلك توقعنا ان نستمع
بها لكننا تائهون منذ لحظة نزولنا
من الطائرة واستنتجنا بعد فوات
الأوان اننا في المحطة الخاطئة .

Yes, we thought we'd enjoy the
trip, but we're completely lost since
we've stepped off the plane and
realized, too late, that we've arrived
at the wrong station.

SAMEERA

لا تقلقوا سأكون أكثر من سعيدة
لمساعدتكم

Don't worry! I will be more than
willing to help you.

AISHA

شكراً جزيلاً

Thank you very much.

SAMEERA

هل يمكنك أن تريني التذكرة:
واسم المكان الذي تودون الوصول
إليه؟

Could you please show me your
ticket and the name of the location
you wish to visit?

AISHA

ها هو

Here it is.

ANNA

Aisha, I can't understand. Is
everything going okay?

AISHA

Yes, yes, she will help us, and will
show us the way to jeonju.

ANNA

Finally!

SAMEERA

اسمعي يا ابنتي عليك أن تذهبي
في هذا الاتجاه سأعطيك الخريطة
التي احملها في حقيبتى دوماً لأنني
أصادف الكثير من السياح العرب
،اسلكي الطرق التي قمت بتحديد
على هذه الخريطة وسأكتب لك
رقمي في حال حاجتك للمساعدة
أثناء وجودك في كوريا

Listen, you need to walk in this
direction. I'll give you my map, which
I usually keep in my bag since I
encounter a lot of Arabic visitors. So,
go in the direction I highlighted on
the map, and I'll write down my phone
number in case you need help while
you're in Korea.

AISHA

هذا لطفٌ كبيرٌ منك يا سيدتي
شكراً مرة أخرى وأتمنى لك يوماً
جميل.

That is really kind of you, ma'am.
Thank you once again, and I wish
you a lovely day."

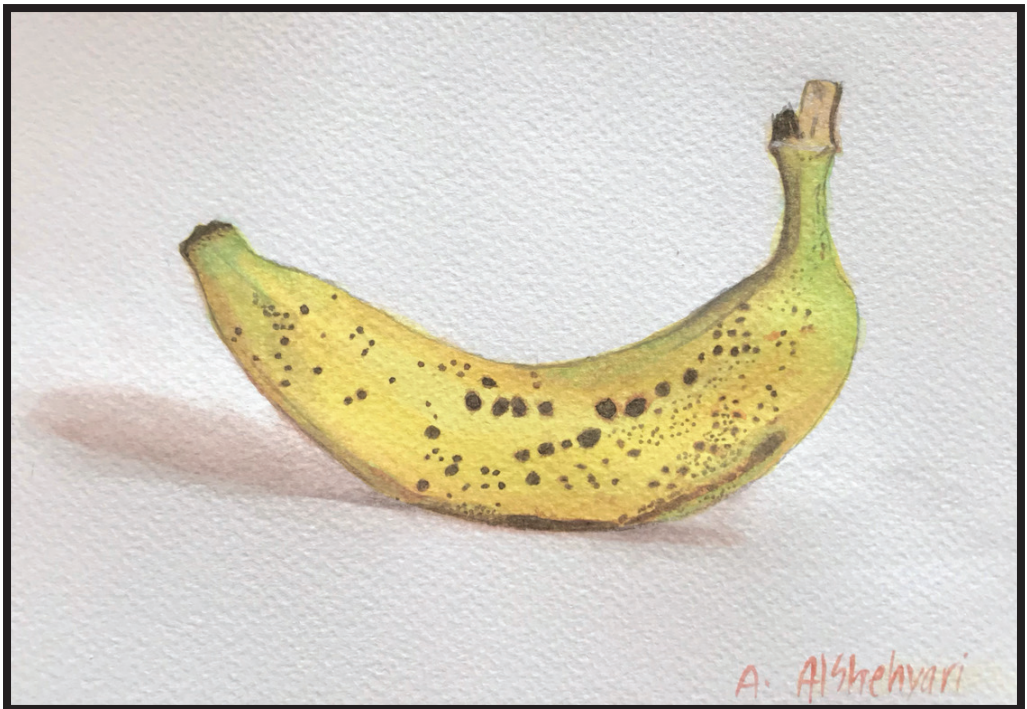
Anna turns to Sameera.

ANNA

Thank you so much for helping us.

SAMEERA

No problem. Enjoy your trip!



Amna Obaid Khamis



Fatima Salem



Gania Alghefli



Manar Alshehhi



Nour Ali Rashed



Sheika Binzayed

THE NEW NEVERLAND

Fatima Al Dhaberi

It has become a custom for the tenants to gather in the middle of the mall square to chat. The tenants and their workers have a good relationship, but sometimes they quarrel with each other. This usually happens after the mall closes, but today is different. The sun is yet to rise, and the workers are preparing for the opening of the mall. Peter is outside the storefront of Miss Fatima's clothing store, called "Neverland." Fatima's store specializes in children's clothing. She designs the clothes herself. The woman's magazine criticized her clothes as being too colorful and extravagant. But this works perfectly for Peter, who is in charge of setting up the storefront. Peter feels fortunate that he gets to design and set Miss Fatima's storefront however he likes. In the past, Peter was not lucky in the job department. He has also been fired a couple of times before. But now Miss Fatima allows him, as she says, "to go wild" when setting the storefront as Miss Fatima sure loves things over the top.

The month of Ramadan is getting near, and Peter is really excited. This is not his first Ramadan, but it the first one since he got the job as the front store designer. It's been a long time since he's been excited about something. He used to go on all sorts of exciting adventures, but things have not been the same since he left Neverland. As he grew older, he was expected to get a job and find a home which he thought would be easy at first. Little did the naïve Peter know that finding and keeping a job is not easy in the United Arab Emirates. He struggled in his endeavor to find a job for a long time. He worked part-time jobs, but he never lasted even a month, the longest being only three weeks. Throughout this period, he felt depressed, as if his world was deprived of color. But that all changed when he started working in the mall.

While Peter is hanging the lamps in the storefront, he notices Alice glaring at him through the window.

“What are you looking at?” says Peter while glaring back. He has never really liked Alice.

“I’m looking at that beautiful storefront,” she says sarcastically. “I just can’t take my eye off that blue monster,” pointing at the mannequin wearing a blue dress. It is not unusual to make fun of Miss Fatima’s dresses for hours.

“Aren’t you busy?” says Peter with anger in his eye.

“Yes, I’m busy winning the competition,” says Alice with confidence. “When the landlord sees my storefront, he will surely be blown away.”

Alice owns the store across from Miss Fatima’s store. She runs a flower shop that is popular in the area. She acts as if she is better than anyone just because her store is doing better than the rest of the mall stores. There is not a tenant that has not fought with her.

“I think you are dreaming, Alice,” said Peter with a smirk. “Someone like you could never win against me.”

“Confident, are you?”

“Of course. Because, unlike you, I still have an active imagination.”

“The imagination that got you fired a couple of times?”

“Sh-shut up...”

Peter cannot come up with a comeback because it is the truth. Often he gets lost in his imagination. Once, he was fired because he fed a woman peanuts when she was allergic. He was working part-time at a grocery store, and that day he was handing food samples. The woman came up to him asking to taste the sample, but she talked so much that it bored Peter. So Peter got lost in thought and didn’t hear her say that she was allergic to peanuts. After handing her the sample, she fell in shock, and he was fired immediately.

After this incident, Peter lost his apartment, which drove him to the street. There he found Miss Fatima who picked him up and gave him a second chance. She took him to her store, which was still not opened yet, and asked him what he was good at, and he said, “I’m afraid there isn’t anything I’m good at. I was once a great adventurer, though.”

“Adventurer, you say?..”

“Yes, Miss, I lived in a far, far away place where I went through many adventures.”

“You have such a wild imagination, Peter,” she said while giggling.

“Yes, ... a wild imagination,” Peter could not tell her the truth, so he agreed with her. But Miss Fatima sensed that something was wrong and said, “But that’s a good thing. In fact, I still need to hire a retail designer, so would you like to try and design my storefront?”

And, of course, Peter agreed. He made the storefront so wonderful, almost like a fairy tale. His ideas came from his past life. Miss Fatima loved it so much that she asked him about the name of the masterpiece and he said “Neverland.” Miss Fatima got really attached to that name because she loved the concept of a fairy tale, and later she changed the name of her store to Neverland.

Working at Miss Fatima’s store brings Peter great joy. In the letters he sends to Caroline, Wendy’s granddaughter, he says that he likes being with Miss Fatima because she makes him feel special and gives him confidence because she accepts the way he is. He also says he doesn’t mind Alice. She reminds him of all the enemies he had back in Neverland. The competition makes his job more fun than it already is. In a way, the mall is his new Neverland, his new home.

Ramadan arrives, and the landlord comes to look at the storefronts in his mall. Most of them are boring, but the ones that stand out are Miss Fatima’s and Alice’s. Miss Fatima’s, with her Ramadan fairies theme, and Alice’s, with her elegant flower Crescent. This is a hard choice.

“And the winner is ...” The landlord gives a long pause to raise suspense, “... both!”

“What?!” shouts both Alice and Peter.

“They are both too good, to be honest,” says the Landlord. “I proposed a competition for a little change, but I never realized that you would do such a good job. So ... good job?”

Alice is furious, but somehow Peter is not. He actually doesn’t mind the weird landlord and finds great joy in seeing Alice’s angry face. Peter Pan is having fun, and staying true to himself.

MANIFESTATIONS OF GUILT

Khadija Boulanouar

I Stand Here Ironing is a short story written by Tillie Olsen and published in 1961. Olsen (1912-2007) was an enthusiastic social and political activist in the transformative years of the United States as the country emerged from the stark horrors of the World Wars and navigated a new public and cultural landscape. This landscape included the rapidly shifting role of women in Western society and the increasing significance of social issues such as feminism and women's rights – all topics experienced by Olsen in her life and explored in her written work.

One particular theme that emerges in this story surrounds the materialisation and manifestation of guilt. The theme focuses on guilt as it pertains to human beings and their personal relationships with their close family members. In this example, this behavior manifests in the mother-daughter relationship. The story primarily surrounds the mother's inner thoughts as she imagines what she will say to an outside character when describing the life of her oldest daughter. The outside character is presumably a school guidance consultant or counsellor and is referred to occasionally as 'you.' In this

essay, I analyse two key items of evidence that display the holistic investigation of the theme of guilt in this story.

The opening paragraph of *I Stand Here Ironing* reveals the fundamentally unhappy state of mind of the mother while pondering the life of her daughter, Emily. As the mother irons her family's clothes, she begins hesitatingly, saying her task ahead (recalling Emily's life), "moves tormented back and forth with the iron." She follows this by saying, "I will become engulfed with all I did, or did not do, with what should have been and what cannot be helped." The details of the mother's tormented reflection on Emily's life and upbringing then unfold throughout the rest of the story.

Initially, the mother describes what a 'beautiful ... miracle' Emily was as a baby. A contrast is then struck as the grim realities of their life are revealed – a poor family supported by a single mother. In between this contrast, seeps the mother's troubled thoughts regarding the decisions she made from when Emily was only eight months old. The mother's inner dialogue begins as a worried series of questionings of her behaviour as a

young mother. She begins to overthink all her actions (in a manner that seems well-traversed), and despairs at the ‘clogged weeping’ of her daughter, deserted daily by a working mother with a ‘worried’ expression and no other options. By the end of the paragraph, it is explicitly clear the mother feels guilty that she has not given Emily a fair shot at life as she is anxious she has not done enough for her. Implicitly, the reader can see the theme of the story unravel as the mother’s thoughts hesitatingly begin as anxious overthinking and then transition to sadness and regret, and finally settle into their essence: guilt.

In order to further investigate the theme of guilt throughout this story, we now turn to a second piece of evidence. Emily is blooming into an intelligent woman with a quick wit, adroit at charming a crowd. She is a lot more confident in herself and in her navigation of the world around her. There is also the added irony of the child who ‘does not smile easily,’ bringing such joy to others. Now the mother’s thoughts are more focused on the future, and the best way to help her daughter. She says, “You ought to do something about her with a gift like that—but without money or knowing how, what does one do? We have left it all to her, and the gift has as often eddied inside, clogged and clotted, as been used

and growing.” The mother repeats her belief that Emily’s humour, like Emily’s sadness at the beginning of the story, has been ‘clogged,’ and that she is somehow responsible for this.

It is immediately evident that the mother’s worrying nature has not completely evaporated now that the story has transitioned to the present tense. Indeed, in the mother’s case, it would not be far-fetched to maintain that this deeply-built uncertainty is integral to her personality, and so to her identity as a character. Thus, one could argue that the mother’s self-doubt means she cannot believe that despite the impossible circumstances, she has managed to raise such an intelligent and talented daughter. This self-doubt probably stems from the mother’s experience as a single working parent at a time when the workforce was unwelcoming to women, and feminism was only in its second-wave. This element of the story’s theme of guilt also ties into Olsen’s aforementioned social commentary that regularly surfaced in her written work.

Finally, the story provides a comprehensive view of guilt by completing the circle of the story at its conclusion. To understand this, we must look at the basic characteristics of mother and daughter. The mother was nineteen when Emily was born – Emily is now nineteen. Emi-

ly is slow to smile, as was her mother at the same age. Most importantly, Emily and her mother have shared their unique experiences of the extreme pressures of poverty and underprivilege. Now that their circumstances have improved, the mother is keen to ensure Emily does not make the same mistakes as she once made; thereby, allowing her struggle against circumstance to laden her with regret. In order to combat this, the mother is insistent that Emily understands her true magnitude and power as a person, that “she is more than this dress on the ironing board, helpless before the iron.” Ultimately the mother does not want her daughter to feel the guilt she feels today, so she closes the cycle of motherly guilt and ensures it does not pass on to her offspring.

I Stand Here Ironing provides an in-depth view of the theme of guilt. Tillie Olsen’s writing dexterously intertwines elements of the theme with characteristics of the characters, and provides a stimulating piece of work that seamlessly blends dreamy fiction and important social commentary. The most notable component of the study of the theme of guilt in this story is its truly holistic nature. The mirroring of features throughout this work gives it a feeling of careful planning, while the overall theme of guilt is open

to explicit and implicit understanding and interpretation. *I Stand Here Ironing* is a thought-provoking story with a theme and message that is skillfully brought to a satisfactory conclusion.

WHEN ILLNESS IS...

Rima Qayed

... irremediable.

It is certainly not unprecedented for a manic depressive to question his or her own sanity. However, when such diagnosis is unbeknownst to the person suffering from it, one might very well develop an obscure sense, an enigmatic perception, towards their plight, because if there is no diagnosis, there is no proper treatment. Such was the case, with Virginia Woolf's chronic illness. Perhaps it might seem rather distasteful, and even crude, to analyze a writer's final work as though it was a piece meant for public consideration as I wish to do here. I do, nonetheless, hope to emphasize its severity and importance and explain my position on choosing to write about Woolf's final lines.

I thought of tackling the physicality of the piece first. I thought I could get it out of the way since it is, allegedly, a somewhat easier aspect to undertake. But, instead, I found myself fumbling with the words to describe the chaos that is the handwriting of a deeply disarranged mind. However, 'get it out of the way' is probably a successful phrase

to describe this work in its entirety, telling by the way the pen strokes are sharp and hurried, how the end of every word has no visible mental and physical strength put into it, and the way the handwriting gradually worsens as the piece goes on. Handwriting whose words and letters one can hardly make out, and whose creator confesses: "You see I can't even write this properly. I can't read" — a personal note that Woolf signed "V," thus 'getting it out of the way.' I cannot possibly be too oblivious to not recognize that a disordered handwriting within this context is not entirely surprising. Therefore, I would now like to shift the attention here to the letter's content. There are statements that can be described as clear symptoms of what we now know as bipolar disorder, a severe case of the disorder that has been left untreated, as is best evident in this line, "I begin to hear voices, and I can't concentrate." The result is, to say the least, utter hopelessness, as reflected in the statement, "I shan't recover this time ... I can't fight any longer." The repetition of remarks is another high indication of the author's afflicted state, seen in

“You have given me the greatest possible happiness ... I don’t think two people could have been happier ... I owe all the happiness of my life to you ... I don’t think two people could have been happier than we have been.” And yet this afflicted mindset does not come off to me as jittery or nervous. Quite the contrary, it strikes me as oddly calm. There is an air of certainty that accompanies Woolf’s words, a resolute sureness of the decision she later performs. It is a certainty of somebody who acknowledges their acceptance of death, acceptance that is not too unlike the one common among people suffering from chronic physical illness, who often feel ready to face death. They accept their fate, because it reaches a point where fighting is seemingly futile. Woolf’s illness, at that point, had become irremediable. Thus, when she writes that she “shan’t recover this time,” she was imaginably right. But perhaps the most significant statement in her letter to her husband is “if anybody could have saved [her] it would have been [him],” because it is in this claim alone lies that tragedy of wanting to be saved, of knowing that there had once been a chance at survival, but refusing to continue existing as a burden, a notion that is conceived within oneself, yet remains powerfully dominant nonetheless.

I find myself bewildered each time I read Woolf’s piece, and a substantial amount of that bewilderment comes from the fact that I am not yet desensitized to it. My reception to it, however, is not that of detached sympathy. Rather, it is alarmingly that of familiarity and thorough recognition of a well-acquainted pain. Reading this work reads to me like something I am yet to write myself, and I would like to say that I regard it as a ‘cautionary tale,’ how ever untruthful that claim may be. For the restraint, it takes a depressive on the brink of death to find the strength to live when it becomes increasingly difficult to do so. It is an act of selflessness, one that is often taken for granted. In the work that she wrote on that Tuesday, at 59 years of age, Woolf honestly believed that she was “doing what seems the best thing to do,” and I commiserate that belief, finding myself in a conflicting position of in part disavowing it, yet being in full understanding of it.

FASHION VICTIMS

Khawla Alhammadi

Name: Yohji Yamamoto

DOB: 3 October, 1943

Place of Birth: Tokyo, Japan

Occupation: Fashion Designer

“People have started wasting fashion”

Fashion has been always a center of attraction. People of all ages are addicted to new trends in that world. The clothes we wear have become more than a way to cover our bodies as women and men. They have become one of the primary ways in which we can express ourselves. We are concerned about what to wear, and how to choose our outfits, so we have started to follow existing fashion styles to be trendy and look stylish in front of others, such as wearing colorful hoodies, skirts, and simple t-shirts. We are affected and influenced by the collections of well-known brands.

Instead, we should attempt to look at how important it is for avant-garde fashion to be wearable. It is a unique and innovative way of dressing by breaking the rules and standing out from the conventional. The Japanese fashion designer Yohji Yamamoto introduced a wholly new way of dressing men and women. It is very creative, unique, and different. Yamamoto claims that avant-garde fashion can create a lasting impact on the fashion industry. He aims to oppose the system of trends by adjusting the way people dress and I aim to support his ideas.

“Everything is covered by fast fashion: faster, faster, cheaper, cheaper.

People have started wasting fashion,” Yamamoto said. His anger against the fashion system motivated and encouraged him to begin his work that counters the trending fashions we are following nowadays. Yamamoto started his own company, Y’s, as a way of influencing young designers to be more creative. He seems to be really obsessed with black heavy fabrics. His cuts are often asymmetrical with unfinished edges. The trendy existing fashion clothes tend to be visually boring and perfectly symmetrical. These choices were made as a part of his willingness to introduce androgyny in his avant-garde designs. He said, “All I wanted was for women to wear men’s clothes. According to Yamamoto, it is not necessary for women to wear feminine clothes. They can dress in men’s designs because covering and wrapping body is a priority. It is shown that his designs are unconventional and futuristic due to the exaggeration of the size and decorations on the clothes. He mentioned that his designs do not represent a specific culture, but they are kind of a mixture of Japanese culture and other cultures from around the world.

Yamamoto believes that the fashion industry will change the quality of designing clothes for people unless they keep wearing their usual outfits. In my opinion, I really like the way he designs clothes because fashion plays an important role in all cultures. It is a language. His effect on world fashion in the last years has been enormous. Yamamoto is still and will always have a huge name in fashion, and young designers must get inspired by his work.



Shamsa Almansoori



Sheikha Mohammed



Aissa Ait Nasser



Sara Ali Ghanim



Shamma Jouan



Shamma Jouan



Sara Ali Ghanim Al Ali



Shayma Alshehhi

BUDDING SCHOLARS

Dr. Robert M. Bridi & Dr. Naeema Al Hosani

The 6th Annual Undergraduate Student Research Conference promoted the undergraduate research of budding scholars at the United Arab Emirates University (UAEU). The conference provides students with the opportunity to showcase their work before their peers and the academic community at UAEU. In addition, students greatly benefit from becoming fully immersed in a research project, gain presentation skills at a research conference, interact with students in an interdisciplinary setting, and showcase their expertise about important topics related to the United Arab Emirates (UAE) and the Gulf region.

Since the inception of the undergraduate conference, students from the Geography and Urban Sustainability Department have been participating by presenting their research projects on a variety of topics. This year was no exception. Featured in this article are two research papers that were presented at the undergraduate conference. The first is entitled *Natural Disaster Management in the United Arab Emirates: Towards Effective Policies and Practices* by Ms.

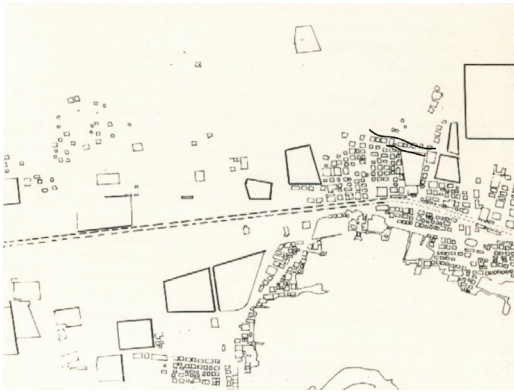
Aysha Juma Abdulla Alghufeli, and the second is entitled *An Analysis of the Urbanization Process in Al Ain, United Arab Emirates: The Emergence of a Modern City* by Ms. Mariam Mohammed Mater Alblooshi. Ms. Aysha's research project was supervised by Dr. Robert M. Bridi, and Ms. Mariam's research project was supervised by Dr. Naeema Al Hosani. The following is a summary of each project and the experiences of the students at the conference.

RESEARCH CONTRIBUTIONS

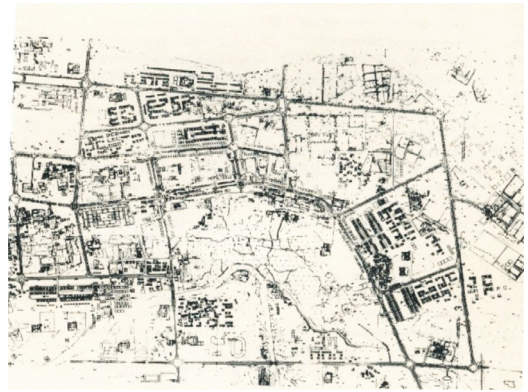
Ms. Aysha's project examines the increase of natural disasters in the UAE during the last two decades. Natural disasters have been rising due to natural and anthropogenic processes that resulted in earthquakes, landslides, and floods. The UAE established the National Emergency Crisis and Disasters Management Authority in 2009 to reduce the impact of hazards through proactive measures taken before a disaster occurs. The aim of the research project is to identify effective solutions for managing natural disasters in the UAE as part of an emergency management framework.

Primary data was collected using semi-structured interviews with government personnel involved in devising policies that address natural disasters and experts that conducted research on the impact of natural disasters on communities. Secondary data was collected from peer reviewed journal articles and government

Ms. Mariam's project examines the emergence of Al Ain from a predominantly desert region to a highly urbanized modern city. This includes the development of an extensive freeway system, parks, and tree lined avenues, three major shopping centers, traditional souqs, service industries, universities,



Al Ain town, 1966



Al Ain town, 1986

websites that address issues related to natural disasters in the UAE. The findings demonstrate that a comprehensive natural disaster management framework includes (1) identifying the most prominent types of natural disasters in the UAE and addressing their related effects; (2) developing appropriate infrastructure and emergency planning procedures; and (3) conducting further research that examines natural disasters in the UAE to produce policies and practices for more effective disaster management.

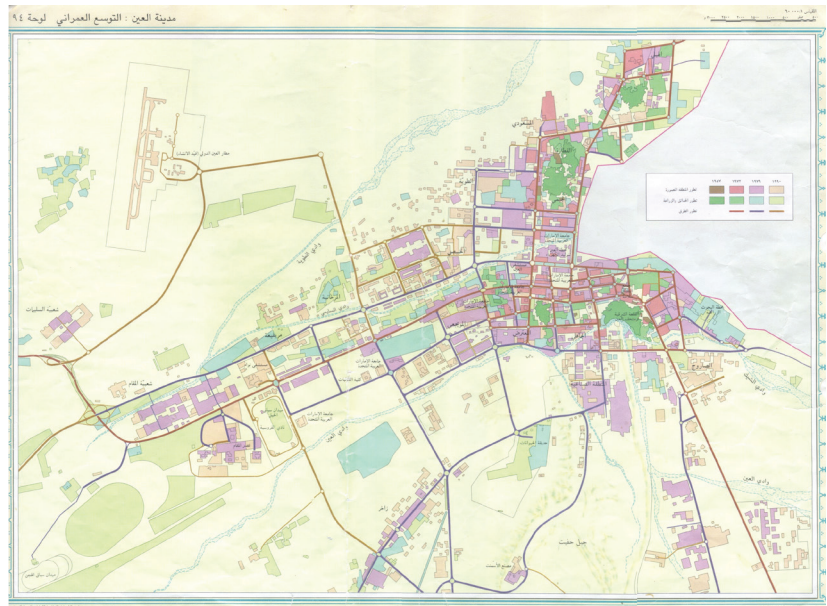
medical facilities, and government buildings. The aim of the research project is to investigate the effects of intensive urban growth in Al Ain by bringing into focus the development of residential areas, population growth, and the expansion of the transportation system. Secondary sources such as peer reviewed journal articles, data from government websites, and Landsat imagery are analyzed to demonstrate the urbanization process. The findings show that the urbanization process in Al Ain

has included significant development of residential areas that attract and house the citizen and expatriate population. This has resulted in significant and intensive population growth and the extensive development of the transportation infrastructure. The urbanization process in Al Ain has been facilitated by significant government funding that retains the city's cultural identity and natural habitat while simultaneously effectively serving a growing and vibrant population.

STUDENT EXPERIENCES AT THE CONFERENCE

Attending an undergraduate conference can be a rewarding experience for students, as it provides an opportunity to interact with other students and hear academic contributions in a collegial and interdisciplinary setting. Students are encouraged to think about how they will frame their work that captures the interest of the audience.

This is especially challenging given that the conference was online. Students planned their pitch, practiced it with friends, and then further refined it through interactions at the conference. Ms. Aysha stated, “[the conference] was so well organized and useful ... [the organizers] have been amazing in the time management and dealing with students ... [students received assistance with the] type of presenting we should follow and get the information we need from the blackboard.” Ms. Mariam said, “I learned a lot from this conference. I am full of good feelings from seeing friends [and] listening [to] new colleagues, [that are] full of fresh idea.” Such experiences provide students some insights regarding a variety of research topics and presentation styles.



As students advance in their academic careers, they begin to develop important skills such as the ability to converse with other researchers and openly articulate their ideas. Ms. Mariam found this both challenging and rewarding. She remarked, “Getting out of my comfort zone was very hard. [But] once I did, it was a liberating experience to break away anxiety.” Another challenge that students faced was related to the online setting, not only in terms of communicating to an online audience, but also associated technical issues. Ms. Mariam stated, “There were some technical issues, but we fixed them.” Ms. Aysha claimed, “I only see the black screen [rather] than seeing people.” While this may be challenging for some students, learning to develop such skills is an important aspect of gaining confidence in academic circles as well as outside academia as students prepare for employment. Ms. Aysha said, “I really recommend [students] to participate in the conference to improve their time management and presentation skills ... the pandemic [helped me learn] to be flexible in any type of situation.” The comments from our students are indicative of the great deal of learning that occurred at the conference.

CONCLUSION

Finally, the undergraduate conference was a great success despite the many challenges associated with the pandemic. Students from the Geography and Urban Sustainability Program rose to the occasion by presenting their individual research projects. Their experiences were exhilarating as they presented their work before their peers and then received feedback. Students learned from presenting their work and receiving suggestions. They also learned by listening and by asking questions. The conference was, by all measures, a successful event.



Shamayel Almurshidi

Learning Korean made me feel the joy of experiencing every flavor of the culture and tasting the delicious symphony of the words. Languages are fun to discover, all you have to do is to try it, savor it and hear its beautiful rhythm to fall in love with it!



Aesha Rashed Alyammahi

The image represents the beauty of African culture and their extraordinary dark skin. The bright colors represents the bright color clothes many Africans love to wear.



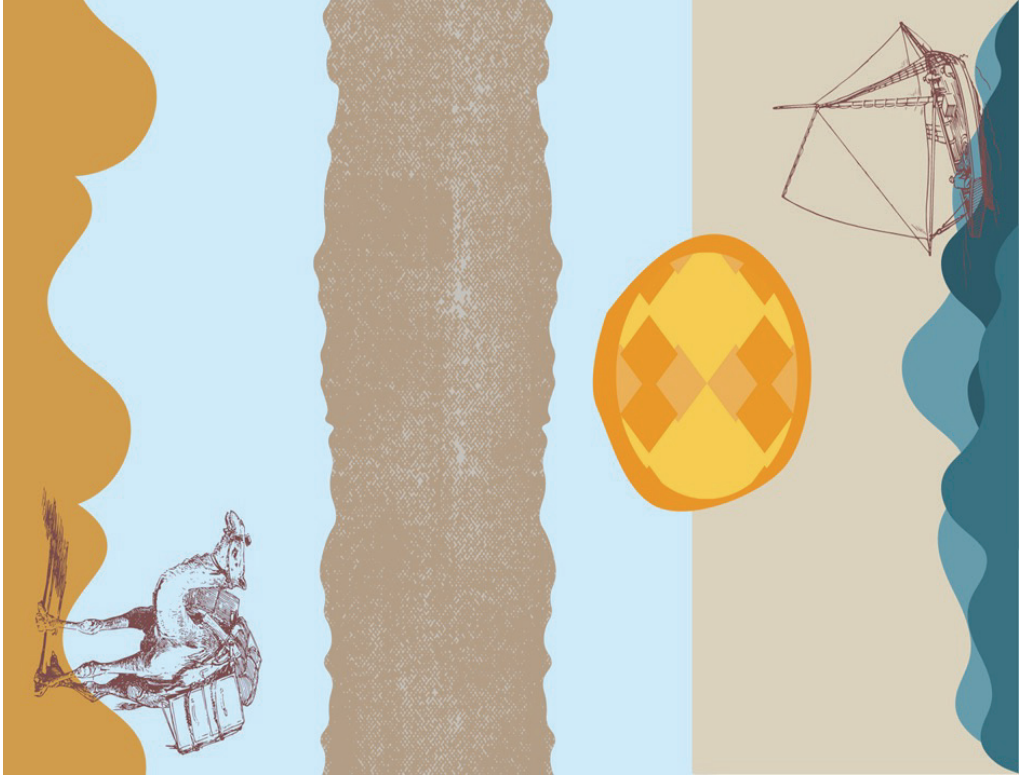
Marwah Aldhanhani

Learning the Korean language is like holding a paintbrush and mixing colors together, an expressive painting, the colors of culture. It makes the beholder dive into a world full of life and love.



Reem Almemari

The image is about Japan between the past and future. Traditional green tea meets traditional vending machine.



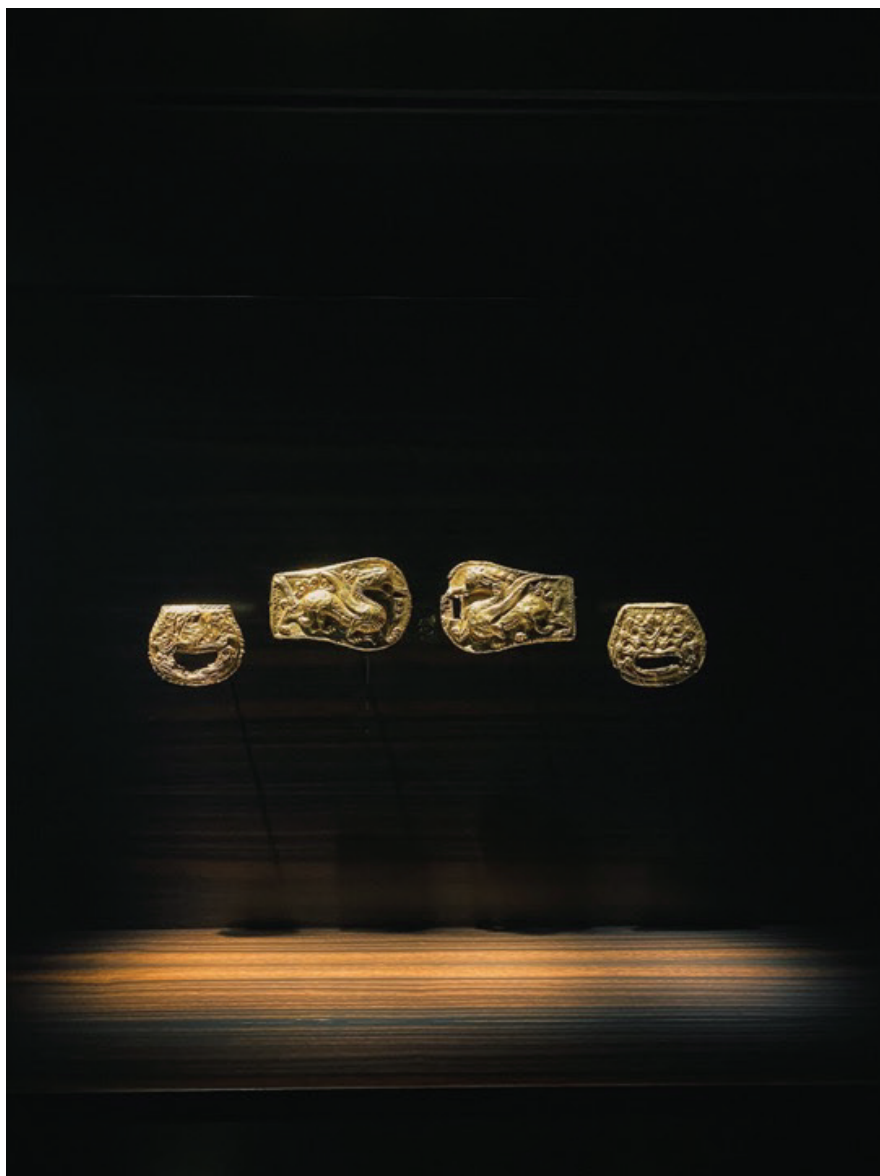
Shaikha M. Aljaberi

In Oman, dunes touch the mountains and they touch the sea. The ship of the desert and the ship of the sea, all joined by one sky.



Riman Alia

Chinese landscape paintings encapsulate a deep aesthetic that values nature. The coexistence of humans and nature is admirable because it sends out a harmonious and peaceful message. It also reflects the simplicity of Chinese life in the past, such as fishing and being around beautiful scenery.



Reem Saleh Almansouri

I took this picture at the Louvre museum. I was amazed by the lights and the aesthetic of this dragon shield, used in war. As always, Asian culture feeds us with beauty, even in small details.



Fatma Alnazar

This art represents “The Plaza De Toros,” the most traditional of Spanish fiestas. It has been the home of Spanish bullfighting since 1929, a controversial practice due to a range of concerns including animal welfare, funding, and religion. Bullfighting is still legal in some areas of Spain, Portugal, Hispanic American countries and some parts of southern France.



Meera Almazrouei, Mouza Alhammadi and Noura Aldhaheri

We had the idea of combining the beauty of Paris and the love of France in a view from a window.



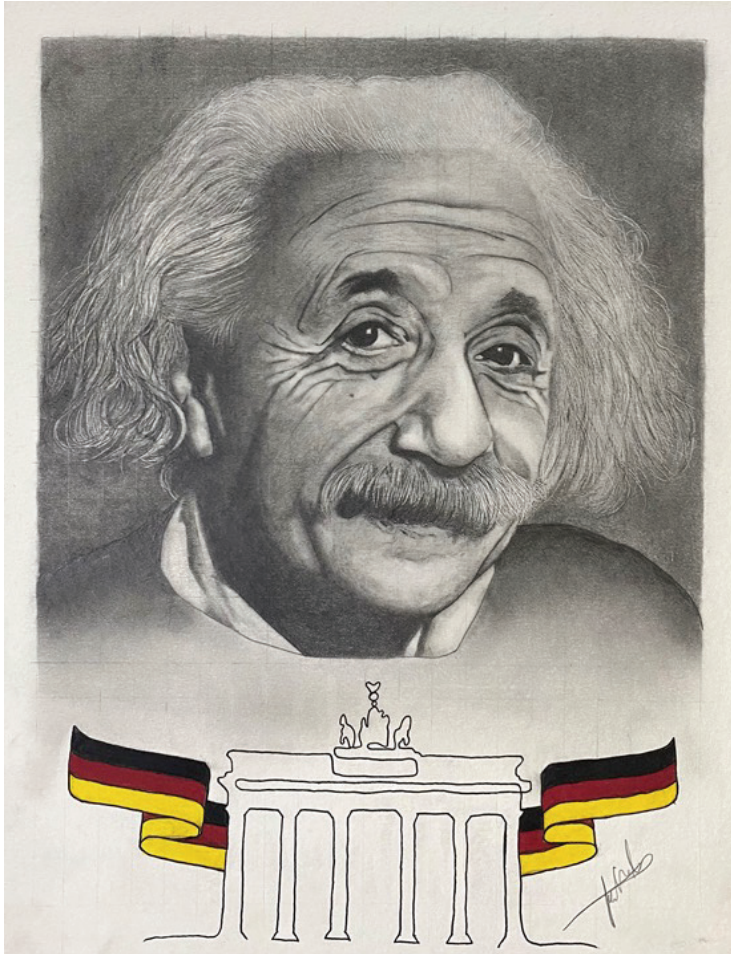
Rawdha Al Riyami

The Emirati dialect is considered one of the rich dialects, including an abundant linguistic stock. Its origins go back to its formation in the merging of dialects coming from the East, West, and South of the Arabian Peninsula.



Roudha Alshahabi

Who doesn't have the past, doesn't have the present.



Fatima Saeed Salem

“The most beautiful thing we can experience is the mysterious.”

-Albert Einstein

German has always been a language that I've wanted to learn. This quote by Einstein drove me to embark on this journey to fearlessly delve into the German language and culture. Before I knew it, I was awe-stricken by the exceptional beauty of it all.

WHAT IS SOCIAL WORK?

Mahra Saif Alshebbi

Social work is a discipline focused on experience that facilitates social change, development, solidarity and empowerment of individuals and communities. The practice of social work requires knowledge of human growth, attitudes, social, economic and cultural structures and experiences. Helping in social work is diverse. We use people's strengths in addition to interacting with different existing systems to achieve the ideal help in solving societal problems. Because of their care and support needs, an adult at risk of being abused or neglected cannot keep themselves safe, then the safeguarding duty of the local authority applies. The role of adult social care workers is to help individuals make decisions and help them to manage risks.

In the UAE, social workers operate within the framework of federal laws to protect and support vulnerable people. UAE social workers working with children and families, for example, use child protection policies and procedures (Federal Law 3) to intervene and provide support to families in order to protect vulnerable children, whereas those working with adults aim to ensure that care and protection needs are met.

In assessing the need for care, support or protection of individuals or families, social workers develop care plans and provide or manage their provision. They are also responsible for the implementation of policies aimed at protecting vulnerable children or adults and ensuring that individuals have as much choice and control as possible over the services they use.

Social Work is a Helping Profession

The primary mission is to improve human well-being and to help meet the basic and complex needs of all persons, with a special emphasis on those who are vulnerable, oppressed and living in poverty. Social workers deal with external factors that influence the circumstance and outlook of an individual.

Nine Professional Capabilities for Social Work



The Technical Skills System (PCF) is the professional backbone of education in social work and professional development. It emphasizes the personal engagement and partnership that professionals need to accomplish the skills and demonstrate our professionalism.

Social Work is a Global Profession

It is a profession that works with people to make change based on human rights and social justice, so that everyone can live well and society can thrive. It is a profession based on practice, and an academic discipline that promotes social change and development, social cohesion and the empowerment and liberation of individuals. As well as the principles of social justice and human rights, it is based on collective responsibility and respect for diversity. It involves people and structures, underpinned by theories of social work, social sciences, humanities and indigenous knowledge, to address life challenges and improve well-being. At national and/or regional levels, the definitions above may be amplified.

Global Social Work

Global social work deals with issues between nations which occur across national borders or that are problems countries must work together to solve. International social workers concentrate on topics impacting billions of people spread across more than 300 nations and districts.

Social work is different from other professions because we focus both on the person and their environment. Social workers deal with the external factors that impact a person's situation and outlook. The most well-known aspect of the social work profession is the provision of services or therapy directly to clients.

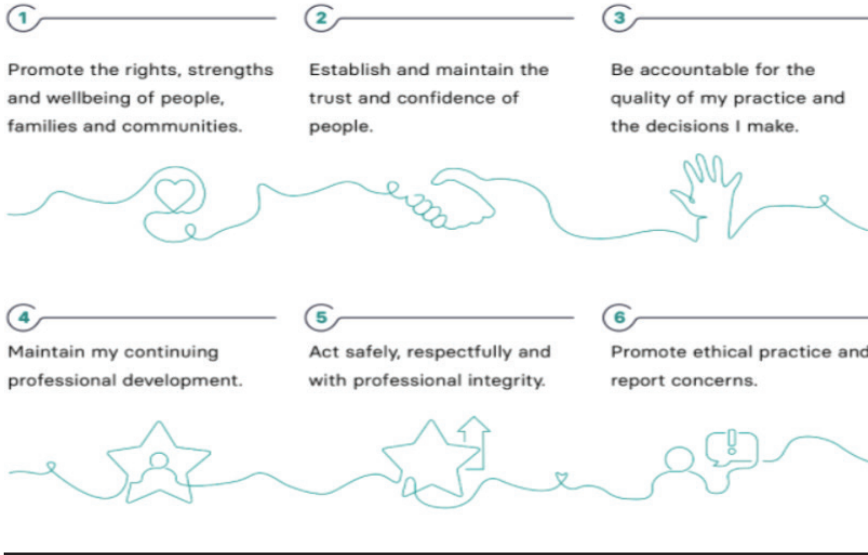
The new global concept of social work is as follows: Social work is a career focused on experience and an enabling academic discipline, growth and social transition, social harmony, and the empowerment and emancipation of individuals.

Social Welfare in The UAE

Social welfare in the UAE is the translation into social policies of Islamic principles, based on values such as ZaKat, Sadaga, Kinship, and Orphan sponsorship.

Also, it focuses on meeting the human needs of individuals, families, groups and communities, following a national belief that every citizen has the right to housing, marriage fund, free education and free health services. The work is carried out by a system of human service agencies and, in some cases, informal social support networks (i.e. UAE mutual aid support). The importance of social work in UAE lies in its goal to solve social challenges in all aspects of life, from offering family welfare one-on-one assistance to influencing legislative policies that eliminate structural injustices. Social service entails helping people to tackle problems.

Professional standards in the social work apply to all roles and settings to registered social workers. The norms are the threshold standards required for safe and efficient practice. Our standards, after engaging with thousands of professionals, reflect the value and diversity of the practice of social work and the positive impact it has on the lives, families and communities of people.



وَتَعَاوَنُوا عَلَى الْبِرِّ وَالتَّقْوَىٰ وَلَا تَعَاوَنُوا عَلَى الْإِثْمِ وَالْعُدْوَانِ

“And cooperate in righteousness and piety, but do not cooperate in sin and aggression.”

It’s important to indicate that the physically measurable wealth we are referring to, in this instance, is not the decreed Zakat, which every able Muslim is supposed to give out, willingly or unwillingly. It’s rather the wealth of convenience, leisure or surplus, which Allah has chosen to bestow upon us, which all come after obligations.

Also, social work is everlastingly rewarding provided there is good intention (for Allah’s sake) behind it. This is understood in a famous Hadeeth, in which Rasulullah s.a.w. said:

إِلَّا مَنْ صَدَقَةً جَارِيَةً أَوْ عِلْمٍ يُنْتَفَعُ بِهَا وَوَلَدٌ : إِذَا مَاتَ الْإِنْسَانُ انْقَطَعَ عَمَلُهُ إِلَّا مِنْ ثَلَاثٍ صَالِحٌ يَدْعُو لَهُ

“When the son of Adam dies, all his good deeds come to an end except three: ongoing charity, beneficial knowledge or a righteous son who will pray for him.”

Social work is a workshop of Allah before it is a profession, and it is a message from Allah that we have to apply and work with.

“I chose Social Work because I have always believed in fighting for human rights. I believe that our profession will change the world at so many levels: we have the ability to serve each person, for the entire family system, and for the communities in which we work.”

Social Work Practice

Children’s social workers support children, young people and their families in times of difficulty, developing family relationships. They work with parents to add greater security and stability to family life or help find another home for the child if necessary. For the kids who depend on them, their work always results in a better future.

A social worker’s role is to develop supportive, open, honest and transparent relationships with children and their families who are at risk of harm. An essential component of being a social worker is the determination of the child’s opinions, wishes and feelings. Social workers support the family’s welfare in addition to monitoring and assessing the needs of the child. They do this by providing data and, if necessary, signposting families to services covering a wide range of topics.

Social work is a systematic way of helping individuals and groups to better adapt to society. The social worker will work together with clients to develop their internal resources and will mobilize outside facilities, if necessary, to help bring about environmental changes. Thus, social work seeks to contribute to greater social harmony. As in other professions, social work seeks to contribute to greater harmony in society.

By helping with social and interpersonal difficulties, promoting human rights and well-being, social workers aim to enhance the lives of people. Social workers protect against harm to children and adults with support needs. Social work is a varied, demanding, often emotional and very rewarding career, from helping to keep a family under pressure together to supporting someone with mental health problems.

Social workers often work closely with other professionals, a practice known as ‘inter-professional working’. Social workers in mental health,

for instance, often work in teams alongside community nurses in mental health, occupational therapists, psychologists and psychiatrists. However, for all social workers, inter-professional work is common.

Emergency Services

The emergency services are the public organizations whose job is to take quick action to deal with emergencies when they occur, especially the fire department, the police, and the ambulance service. Social work is the fourth emergency service. An emergency is a situation that poses an instantaneous risk to health and life.

The most urgent action of emergency services is to immediately prevent worsening of the situation. Social workers should lead support group discussions, provide individual counseling, help patients determine appropriate health care. They may also provide complete care to reduce the psychological risk in serious cases. Social work is every bit as important as a doctor's because, without it, a patient's psychological condition may deteriorate.



Knowledge and Skills

In order to understand and build relationships, social workers need to apply a wide range of knowledge and skills and work directly with individuals, their families and careers to enable and empower them to achieve the best results.

They need to understand the impact of poverty, inequality and diversity on social and economic opportunities, and how they relate to the health and well-being of people, as well as the functioning of

their families, particularly in relation to child protection, the protection of adults and the empowerment of individuals who may lack mental capacity.

They need to apply a wide range of knowledge and skills to help build family relationships, resources and resilience, so that the child's well-being remains paramount. They need to identify the full range of risks to children and help manage those risks. They must ensure adequate intervention, including securing and promoting alternative children's homes, including those placed with family and friends and for adoption in and outside public care, and provide care and support to young people as they move towards independence and adulthood.

Values and Ethics

Values are basic and fundamental beliefs that guide or motivate attitudes or actions. They help us to determine what is important to us. Ethics is concerned with human actions, and the choice of those actions. Ethicists evaluate those actions, and the values that underlie them. Ethics serve as a guide to moral daily living and helps us judge whether our behavior can be justified. Ethics refers to society's sense of the right way of living our daily lives. It does this by establishing rules, principles, and values on which we can base our conduct. Six core ethical values are trustworthiness, respect, responsibility, fairness, caring, and citizenship.

Care and Control

Care and control is very important for social work when a decision is needed for a client. If we ignore control in our resolution in social work, it will be ineffective. If we ignore care the work is not only likely to be ineffective, but potentially abusive and oppressive. The social worker rests uncomfortably between helping individuals and acting for society, between being an agent of the client and of social services.

Social work's role in child protection is one that combines care and control. This involves providing services for children in need and their families whilst also safeguarding and promoting the welfare of vulnerable children. The social worker is the key to good child protection work.

“...care and control, rights and risks, legalism and professionalism have to be weighed. The social worker rests uncomfortably between helping individuals and acting for society, between being an agent of the client and of social services. The law, then, can be used to enforce clients’ rights, afford them protection or to secure social control.”

(Stevenson, 1988: 28)

Three Houses of Social Work

There are three types of houses, and each house reflects a need for social workers.

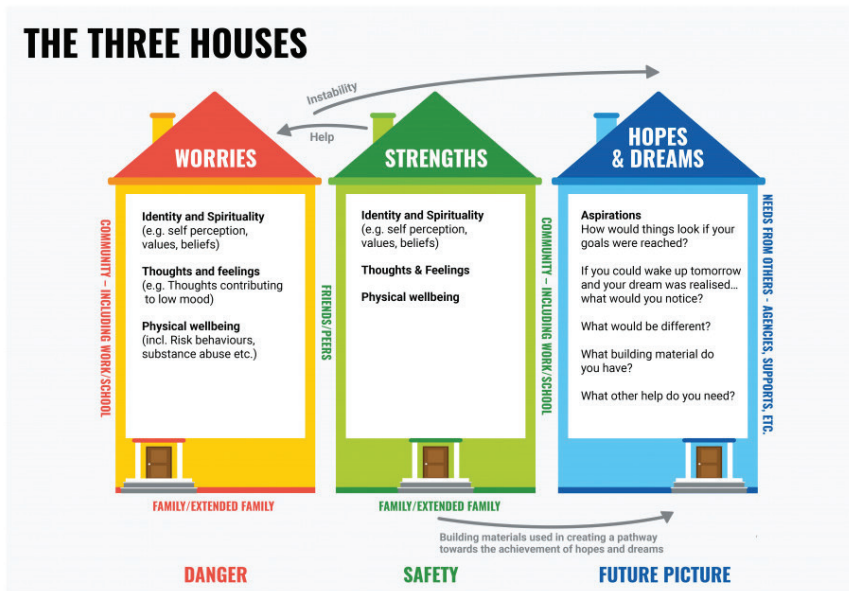
The Red House shows signs of danger. There is violence in this house, and there is no God, no family support, no social support or spirit or feelings. Everything in this house is wrong.

The Green House is a safe place. In some ways, it is like the red house, but differs in that it has family, emotional and social support, and it has feelings, happiness and well-being.

The Blue House refers to the future. In this house will be found hopes and dreams. Every family in the red house dreams to reach the blue house.

As a social worker, my profession is to move people, children and families from the Red House to the Green House for stability and a sense of safety, and then to the Blue House.

The foundation is the most important consideration in all of this. In the Red House, the foundation is either fragile or non-existent, and the people inside are easily broken down. There are no foundations to make them stand and be strong. But from the beginning the construction of the Blue House was correct and had energy and support. Even if a hurricane came, it will not be affected as the Red House would be.



DO IT, PANDA

Fatima Zain

Work damages physical health. One night, when I was at work, I received an email. It said that working hours had been increased because the company was facing critical issues due to the lack of employees. A storm of thoughts blew through my mind, and my face flushed red with anger. I wanted to burst out shouting, ‘How can something like this happen?!’ How could I go to the gym now?

Late that night, I came back from work with bowed shoulders and puffy eyes. Yes, work was destroying everything. No wonder all the gossipy old workers called me Ms. Panda. And they weren’t lying. I was seriously a panda, with dark circles around my eyes and a puffy body. That day I spent at the company was the straw that broke the camel’s back, and the panda’s.

“I have to exercise, and now!” I screamed loud enough to wake the dead. For a moment I hallucinated, hearing an old lady replying from the graveyard in the district where I lived, “Do it!”

I decided to do my exercises, no matter what. I would transform from a panda to a dinosaur right there in my kitchen. I grabbed my laptop and searched for a video, looking for a professional coach, thinking “Yes! Yes, yes, I will turn to Angelina Jolie within an hour! I can do that. Even Brad Pitt will propose to me.”

I’d forgotten about the divorce.

I worked out my legs here and there, rolling my neck from side to side to loosen kinks. I wanted those talkative old men to regret calling me Panda. I wanted nothing but to lose the weight I gained because of that dull and crazy company. My body was shaking and trembling, and so it was at that moment of greatest distraction, when I was lost in a fantasy of obliterating them with Jolie-esque kung-fu efficiency, I collapsed onto my right knee with all my panda-esque weight.

The pain hit like a hammer. The knee was broken. I crawled to the

kitchen, thinking of the ice I'd saved in the freezer. I pressed a kilo of it on my knee. Eventually, I lost feeling in my leg. I thought that if I returned my knee to its proper position then everything would be fine, and I would be able to go to the hospital later on with no issues. I recalled the first aid training I'd undergone at work. Finally, I'd got one useful thing out of that useless company!

Since the pain had stopped, I began to believe in my own genius. Maybe the time was right to call the Japanese, let them beg me to help the scientists there.

Believe in yourself! Just listen to that dead lady from the graveyard, and do it!

I pushed my bones against each other, and the pain flushed again. I swallowed, then with eyes closed tight, I pushed and pushed with all my power. The Japanese failed me.

The person you are trying to call is not available at the moment.

They hung up. My body shook. Whoops, that scary moment had happened! My right leg, from the knee down, was entirely in my hand, separated from my body. Blood poured from my knee like a waterfall. I thought all the blood inside my body would come to an end, that I'd die. Was there a chance to progress to an advanced level—I mean, turn into a ghost? Then no one would bother me, not even the old gossippers; everything would be under my control.

I screamed like thunder, "What have I done to myself!?"

The pain began to fade, and soon I felt nothing at all. Here was another chance to get connected with the Japanese. I covered my wound with gauze and tossed my broken leg into a bag. A hospital was very close to my home, which explained the graveyard. It was the kind of hospital that had a billboard reading, "Every soul shall have a taste of death." You enter this hospital alive, and get kicked at the speed of light to that graveyard.

Having no chance but to head to that hospital, I had to think of a way to reach it. I grabbed my phone and tried to find an available taxi driver, difficult at that late hour of night. I cursed my luck. It had to be the

right leg that was broken, otherwise I could have driven myself. My eyes watered with happiness: thanks to God I found a driver! A few minutes later, he knocked at my door. So amazingly quick! I smiled at him—a yellowish, blood-drained smile that showed my teeth. Then he saw my leg. As an attempt to calm him down, I said, “It is fine, don’t worry, my leg is here,” and I took the bloody, unshaven leg out of the bag to show him. When I looked up, he’d gone. The guy was the Flash!

Sitting on the floor, close to the open door, I stared there at nothing and nowhere, drowning in my thoughts. What advantage had I gained from holding onto my job? The kind of job that threw me into a terrible and scary life of nightmares. They’d danced in my head every night since I’d been employed, and I was sure they would not stop until I made an end to it. While I was hallucinating, I thought the disconnection with the Japanese had caused an error in my mind, so instead of calling an ambulance, I’d called a taxi driver. As I realized how brilliant I was, I fainted.

In the end, I called Emergency, and they transferred me to the hospital for the necessary treatment. Luckily, the doctors re-attached my leg, and when I told them my story, they suggested finding a job with fewer working hours.

A month later, I was better. The hospital was not bad as rumors said! I headed to my room, and opened my laptop, there I saw a mail from my boss saying three words:

“You are fired.”

In response, as always, I had to go one better. I typed four words:

“You are fired, too.”



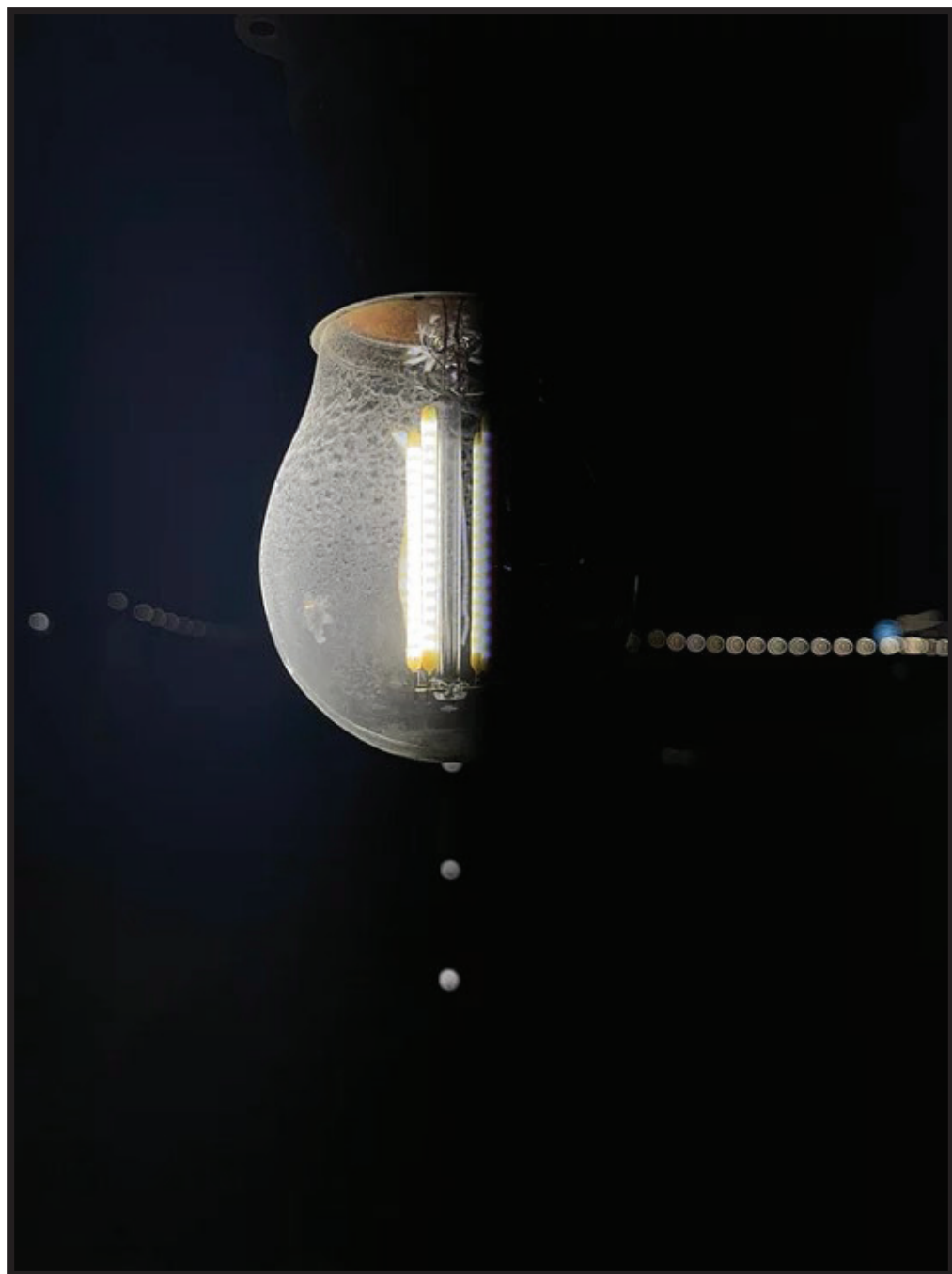
Aysha Saif Saeed



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Attitudes and Values for Elderly Among Emirati Youth

Shamma Hamad Almansoori

Supervised by Dr Tatiana Karabchuk

Introduction

Sixty five is a defining age in the life of a person, as it is the moment of retirement in most countries of the world, and upon reaching it the entire human life changes, professionally, socially, and in terms of health. Seniors are adult persons over the age of 65 years. This research focuses on the social change of seniors in UAE in the eyes of Emirati youth to see how much they value in their grandparents.

To what extent are the youth are supporting elder people to live together in the same house, or is their presence stressful for them? If they are burden on them to take care, what do they do for them, and how they behave towards them? Two theories were chosen to test in the study. First is conflict theory, According to the conflict theory of aging, older people suffer from age discrimination and prejudice, as well as inequality due to their age. For this reason, I would like to test this theory in the UAE. The second theory is the demographic transition theory.

The purpose of the study is to understand the value for the elderly in UAE among Emirati youth. The study used a quantitative methodology to address analyze attitudes of Emirati youth toward the elderly in their family by conducting a one-time online survey of Emirati youth aged 18-24.

Literature Review

The factor of ageism holding the negative stereotypes and attitude towards older persons and that factor of age leads to oppression and discrimination (Teater, 2018). According to Asia-Pacific Triennial (1999), in most countries the main debate topic was linked with the crisis and decline of the customary and traditional support related to older persons. Family support toward older persons has been responsible for such place with the formal welfare system (Lüscher, 1998). According to research, siblings in large families interact less with their parents compared to those in smaller families. Interaction with parents and siblings influence the position of the child and also in the sibling network (Galen, 2008). Filial obligatory values which younger kin feel towards their older kin are represented in the shape of social capital investment, and that investment operates the policies about insurance for parents to draw on when needed. Integrational solidarity is more complex than functional and normative solidarity (Silverstein, 2006).

Two most important effects are noted in respect of international relations. The first point is related to the economic dimension and the second to international migration. According to the first point, the phenomena of globalization has had highly unequal effects on older people's lives. Globalization also provided a new force to financing and transforming the old age towards individual duty and responsibility. On the other side, growing to be old is also viewed as a global concern and individualization has become a risk for life course (Izuhara, 2010).

In the United States, for working parents, grandparents are the main sources of child care. In the life of a grandparent, considerable demand is added due to the grandchildren's care. These considerable demands in the life of grandparents increased the level of stress, loss of sleep, and feelings of overload and isolation (Hughes, 2007). According to this research in

aging societies, all individuals have their surviving kin and mostly have their generational kin. The structure of the kin is varying over a life course but only relatively across nations. The presence of generational kin increases the demand on the reliance of the kin during times of need. Avoiding this, the lineage complexity has no impact. Compared to other nations, Americans are more reliant on their assistance of spouse rather than others. All these differences are pronounced between the elderly. On the other side, because of the weak public welfare system, Americans also need the assistance of their kin in financial matters (Maddox & Lawton, 1993). According to African traditional values and trends, African older citizens rely on the support of their younger kin. This adequacy or trend of help or support of older persons has declined. This trend was also unfavorable in the urban context in Africa. In recent decades in Ghana, questions have arisen about the formulation of policy over a decline of family support in the context of demographic and socioeconomic change. In the past, Ghanaian trends and traditions were based on kinship, but at present the Ghanaian population is 40% urbanized, and the economy of the society depends on the export of raw material and aid. Due to the decline of family support in the Ghanaian society, family support is the responsibility of younger kin (Aboderin, 2004).

Methodology

The study was based on a quantitative method. Through this, the behavior of people is described in mathematical and statistical forms. Quantitative research represents views in numerical form. Data was collected through the questionnaire, used because a questionnaire is the best way to collect and combine the data taken from different participants for the statistical analysis. The survey contained 25 questions. SPSS was used to identify the relationship between the two variables. Non-probability sample (quota sampling) was

used.

The study tested the following hypotheses:

H1: If a young person is living in an extended family, he/she will have more supportive and caring attitudes towards their elders.

H2: If young people have stable income they can share part of their income with grandparents or their elder relatives.

H3: People from rural area are friendlier and taking care of grandparents more than people from cities.

To test these hypotheses an online survey questionnaire was used as a research instrument for data collection from the sampled Emirati youth between the ages of 18 to 25 years. The study consisted of 164 respondents (146 females and 18 males).

Results and Conclusions

In many countries like the UAE, grandparents are a significant child care source for job-holding parents. In the lives of grandparents, considerable demands are also linked to this. Such demands in grandparents' lives have increased the level of stress, loss of sleep, and feelings of overload and isolation (Hughes, 2007). In the case where the child's attitude is friendly towards grandparents, these problems are comparatively lower. Arabs are more reliant on their assistance from the spouse rather than others in the family. On the other side, people also need their kin to meet financial needs (Maddox, & Lawton, 1993).

Older citizens usually rely on the support of their younger kin. According to the research, the trend of help or support of older persons has declined. In recent decades in the UAE, the question has arisen over a decline of family support in the context of demographic and socioeconomic change. Emirati trends and traditions were based on kinship in the past, but at present, the population is 40% urbanized, and the economy of the society depends

on the export of raw material. Due to that, family support has declined in Arab society; otherwise, family support is the responsibility of younger kin (Aboderin, 2004).

The results of this study showed that the attitude we adopt to the elders especially grandparents is not dependent on the type of family in which we live. Similarly, the attitude of the youth towards elders or grandparents was also not dependent upon the level of household income. This means that there is no role of income in developing attitudes towards the elders in the family.

The attitude of youth towards elders was also independent of the quality of living or the place of residence. Therefore, it may be the inner feelings of someone who force him to be positive towards his elders or grandparents. Hence the type of family, level of income, or place of residence does not affect the attitude of the youth towards the elders or grandparents. If anyone is very positive towards his/her grandparents it may not be due to his/her type of family he or she is living, level of household income, or place of residence. The above results are also supported by Gaire (2019) who concluded that the attitude of youth towards elders is highly dependent on gender and occupation.

Keeping in view the conclusions, it can be argued that attitude is independent of all the variables under study, hence it can be deduced that intrinsic motivation can make Emirati youth more positive towards the elders. Hence, there is a need to develop a strategy to motivate Emirati youth intrinsically to develop a more positive attitude in them. Youth participation in motivational lectures, seminars, speeches, conferences can improve their attitude. Media can play a very important role in this regard.

Noise Reduction Using Cavity Resonators

Leen Alrawas

Introduction

Noise is defined as an undesired sound. High levels of noise can disturb humans and cause serious health problems. In contemporary industrial operations, sources of noise are related to machineries used in industry, and as more developed factories are being operated, more clamorous machines are being used. The impacts of noise on the personnel working at these facilities include increase in blood pressure, increased stress, fatigue, vertigo, headaches, sleep disturbance, speech problems and, in rare cases, permanent loss of hearing [1]. Furthermore, there is a concern that the noise may drown out the sound of emergency alarms in the facilities. This paper aims to investigate noise reduction methods using cavity resonators, of which two cavity resonators will be focused on: quarter-wave resonator and Helmholtz resonator. In particular, the study compares these two resonators and explains how one can be more effective than the other in certain circumstances and in specific aspects.

This paper is divided into four main sections. The first section gives a brief overview of the physics of noise and how it is generated. The second section explains the theory behind quarter-wave resonators and Helmholtz resonators. In the third section, some experimental results from previously published papers are analyzed. Furthermore, the principle of using cavity

resonators in reducing noise is supported by an example. Finally, the paper compares the two resonators in the last section where several conclusions are drawn.

The Physics of Noise

Sound (in air) is identified as an oscillation in air pressure. The sound waves we experience are not usually pure tones, but rather a mixture of pressure variations which consist of various frequencies. In the field of acoustics, a pure tone refers to a single frequency sound wave. However, any complex sound signal can be represented as a combination of several (or infinite) sinusoidal waves, each with a single frequency. To illustrate noise formation, we begin with the example of a vibrating piston moving forward and backward in a very long tube filled with air with uniform pressure and temperature, as demonstrated in Fig-1 below.



Fig-1

The cyclically moving piston produces periodic variation in air pressure, and hence a sound wave. The variation of pressure over time can be represented as a sinusoidal wave with a single frequency f_1 , as demonstrated in Fig-2 (a) and (b).

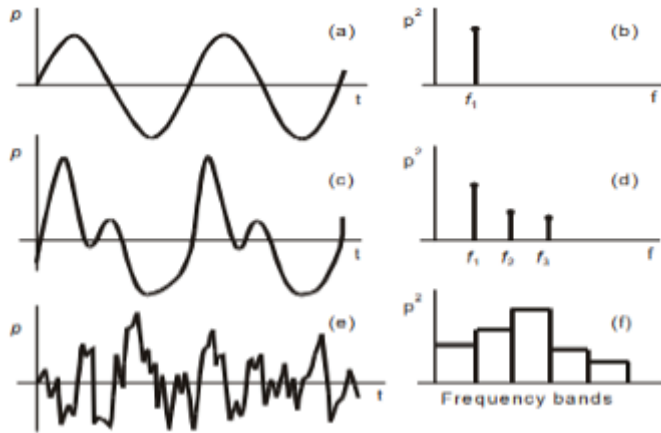


Fig-2

Now consider moving the piston irregularly but cyclically along the tube; it produces more complex sound waves with several frequencies, for example as in Fig-2 (c). Disturbance in pressure p varies with time t as a combination of three sinusoidal waves, yielding three single-frequency components f_1 , f_2 and f_3 in Fig-2 (d). In Fig-2 (e), disturbance in pressure varies randomly over time because the piston motion is not cyclical. As a result, there is no set of discrete frequencies for this signal, but a frequency band spectrum. Erratic fluctuations of pressure produce a complicated sound wave which we experience as noise [2].

Theory

A – Quarter-wave resonator:

Consider a sound wave under boundary conditions, that is, a sound wave in a column of air. There are two types of pipes where sound signals can fluctuate: pipes closed at one end, and pipes open at both ends.

In the first type, a displacement node exists at the closed end. This refers to the point where the amplitude of the displacement of the sound wave is zero. The wave cannot oscillate at this point because of the rigid barrier of the pipe. A displacement node corresponds to a pressure antinode, which refers to a point of maximum pressure variation. In the second type, the open end is approximately a displacement antinode and a pressure node. It may be understood easily that a pressure node exists because the pressure does not vary at an open end but must remain constant at atmospheric pressure. In these two systems, discrete sound wave frequencies can be magnified, and they are often referred to as resonance frequencies forming a harmonic series [3].

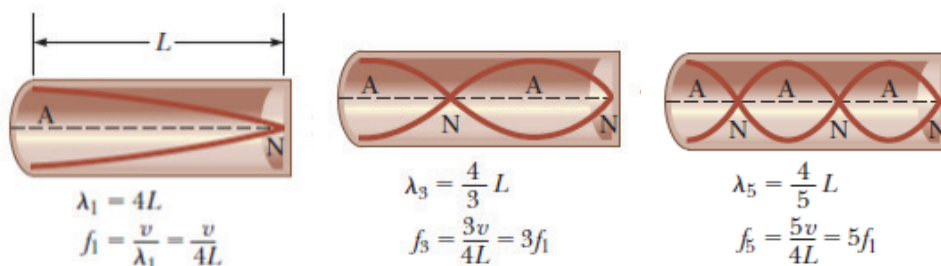


Fig-3

The speed of the sound wave is given by:

$$(1) \quad v = \lambda f$$

where λ stands for wavelength.

Fig-3 above shows that:

$$(2) \quad \lambda = 4L / (k)$$

where k is an odd integer.

Combining (1) and (2) we have:

$$(3) \quad f = kv/4L = kf_{-1}$$

The harmonic series contains only odd integer multiples of the fundamental.

B – Helmholtz resonator:

A Helmholtz resonator is described as a container of gas with an open hole. In this type of resonators, the air vibrates in and near the open hole (usually a hole with a neck). For the sake of simplicity, we will assume that the wavelength of the sound wave produced is much larger than the volume of the container and the length of the neck. The outcome of this approximation is that the pressure variations inside the container are negligible: pressure oscillation inside the container has the same phase everywhere [4].

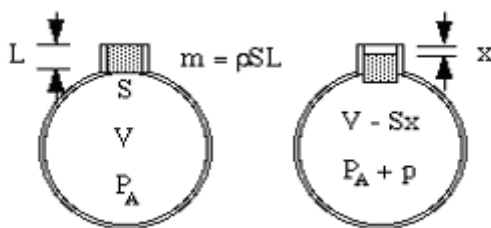


Fig-4

A volume of air acts as a plug in the neck of the container. For a neck with length L and cross-sectional area S , the mass m of this volume of air is ρSL where ρ is the density of air. This mass of air compresses the air in the container when it descends a small distance x into the bottle (Fig-4 above). Taking advantage of Newton's 2nd Law, we can write an expression of the force acting on the gas, and in this case, it is only produced by the pressure P .

$$F = PS = am, \text{ where the acceleration } a \text{ can be written as } a = (d^2x)/(dt^2)$$

The relationship between the change in pressure and the corresponding change in the volume is given by:

$$\Delta P = B (\Delta V)/V$$

where B is the bulk modulus and ΔV can be expressed as $\Delta V = -Sx$

It is generally known that the speed of sound in a gas is obtained by:

$$v = \sqrt{B/\rho}$$

By combining the equations together, it may be verified simply that:

$$(4) \quad PS = (-BSx)/V * S = (d^2x)/(dt^2) * \rho SL$$

$$(-BSx)/V\rho L = (-v^2S)/VL * x = (d^2x)/(dt^2)$$

Equation (4) above is an equation of a simple harmonic motion with ω^2 being the positive coefficient of x .

$$(5) \quad \omega = \sqrt{(v^2S)/VL} = 2\pi f$$

Rearranging equation (5) above reveals that the frequency is:

$$(6) \quad f = v/2\pi \sqrt{(S/VL)}$$

Using cavity resonators in reducing noise:

The principle of cavity resonators may not be considered complicated. It is based on the phenomenon of air resonance in a cavity. When air is forced into a cavity, the pressure inside the cavity increases. Similarly, the air pressure inside the cavity flows outwards (decreases) when the air source is removed. The pressure that flows outwards tends to compensate. As a result, the pressure inside the cavity becomes lower than the outside, thereby forcing the

air to come back into the cavity. The pattern continues causing a successive diminution in the pressure magnitude, leading to noise reduction [5].

Applying the principle using a realistic example:

Fans are a significant component of machines used in industrial plants. However, they are also a major source of noise.

Table-1 shows noise power output from the most common types of fans measured in dB.

Fan Type	Centre Frequency - Hz							
	63	125	250	500	1000	2000	4000	8000
Centrifugal Airfoil	35	35	34	32	31	24	18	10
Centrifugal Backward Curved	35	35	34	32	31	24	18	10
Centrifugal Radial	48	45	43	43	38	33	30	29
Centrifugal Forward Curve	40	38	38	34	28	24	21	15
Vane Axial	42	39	41	42	40	37	35	25
Tube Axial	44	42	46	44	42	40	37	30
Propeller Axial	51	48	49	47	45	45	43	31
Tubular Centrifugal	46	43	43	38	37	32	28	25

Table-1

All the types stated in Table-1 above are subject to blade passing frequency (BPF) noise generation. Calculating the expected BDF can be achieved easily; it depends on just two factors: the number of blades a fan has and the rotational speed. In addition, BPF is always generated at a fixed frequency [6].

$$(7) \quad BPF = (No.Blades \times RPM)/60$$

An example of an industrial fan would be a fan with four blades, and a

speed of 1500 revolutions per minutes. Using equation (7) above, we get:
BPF = 100 Hz.

Both quarter-wave resonators and Helmholtz resonators can be used to decrease noise levels for the sample fan. Substituting the frequency in the equations of the two types of resonators yields an example of what the dimensions can be for each type. Equations (3) and (6) above allow for a formal solution to be found.

- Design:

Quarter-wave resonator:

$$100 = 343/4L$$

$$\text{Length} = 85.8 \text{ cm}$$

Diameter should be a few centimeters, for instance: 8 cm

Helmholtz resonator:

$$S/VL = 3.3556$$

$$\text{Let radius of neck be} = 3.00 \text{ cm}$$

$$\text{Length of neck} = 1.00 \text{ cm}$$

$$\text{Volume of container} = 0.03745 \text{ m}^3$$

$$\text{Container height} = 80.0 \text{ cm}$$

$$\text{Container radius} = 18.3 \text{ cm}$$

An experiment on four types of cavity resonators was conducted in 2020 by a group of researchers in Ajou University, Suwon, Republic of Korea [7]. In this paper, only two of these resonators are addressed. The authors investigated the differences between the resonators with a target resonance frequency of 400 Hz, giving similar dimensions for both resonators, as demonstrated in Fig-5 below.

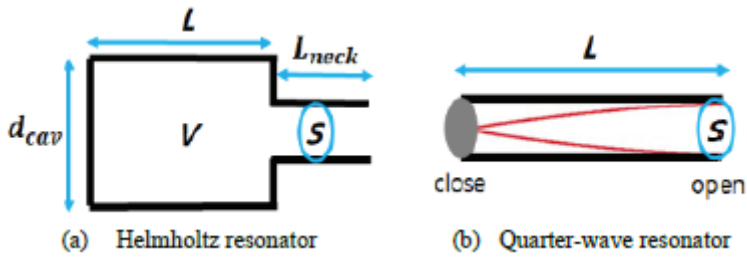


Fig-5

Each resonator was installed in the middle of the duct under the same conditions for adequate comparison (Fig-6 below). The analysis is based on comparing the acoustic power of the inlet and outlet. Transmission loss is obtained for each resonator; it is a representation of noise reduction.

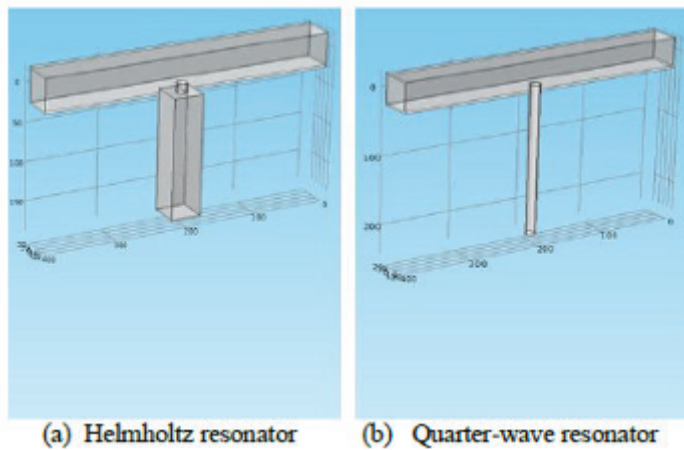


Fig-6

The experimental results indicated that the Helmholtz resonator has the largest transmission loss, followed by the quarter-wave resonator. Moreover, the authors conclude that the noise absorption was best at the target resonance

frequency 400 Hz. However, the resonant frequencies for the quarter-wave resonator appear in addition to the fundamental frequency and can also be absorbed. These frequencies are an odd multiple of the fundamental as the above equation (3) reveals [7].

Helmholtz resonators have larger volumes compared to quarter-wave resonators when both resonators have the same length. Since Helmholtz resonators can occupy relatively large space, it is advised to decide the perfect dimensions of these resonators carefully. A study conducted in 2015 by A. Mahmud, S. Islam, Z. Hossain, and M. Morshed reveals that changing the geometry of the resonator neck has a more significant effect on the resonance frequency than changing the dimensions of its cavity [8]. This agrees with the theoretical results in the above equation (6); the resonance frequency increases with the larger cross-sectional area of the neck S , and decreases with the larger neck length L . Furthermore, the cylindrical resonator is the most effective one in attenuating noise between conical, spherical, and cylindrical types of Helmholtz resonators [8].

Conclusion

This study presented a complete analysis of the theory behind quarter-wave resonators and Helmholtz resonators and their useful function of reducing noise. There are considerable differences between these two types of resonators that can be summarized under three main aspects: space needed, ability of adjustment to match the correct frequency to reduce, and efficiency.

Space needed:

Compared to a Helmholtz resonator, a quarter-wave resonator requires less volume to collect the same amount of acoustic energy at a given frequency.

Ability of adjustment to match the correct frequency to reduce:

The Helmholtz resonator has its own fixed natural frequency that depends on key dimensions, such as neck length, container length, diameter of the neck and cavity

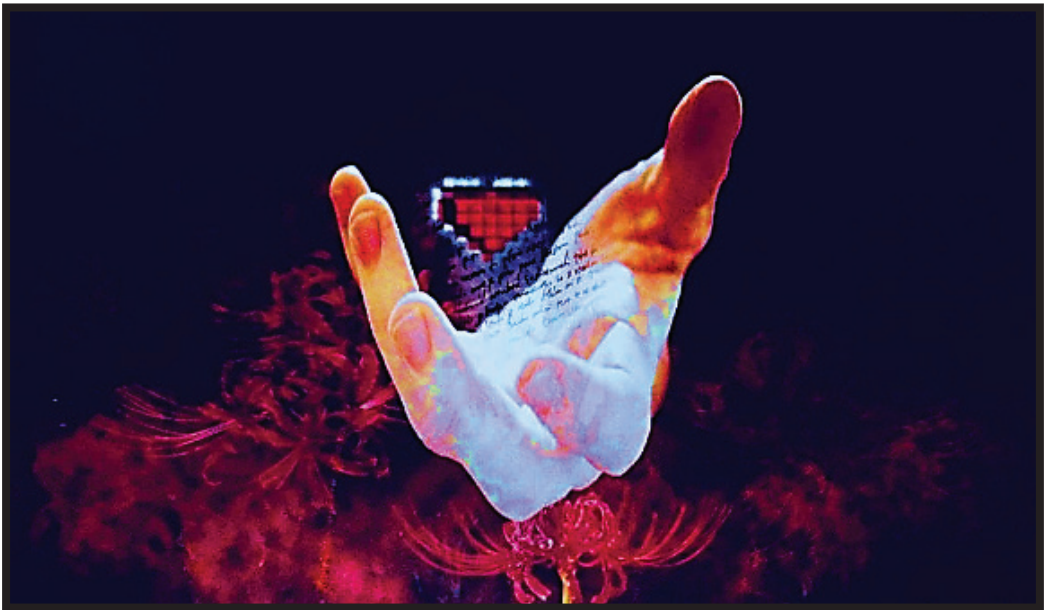
volume. The quarter-wave tube has an odd number multiple of resonance frequencies and thus can be adjusted to a wide range of frequencies.

Efficiency:

For the same resonant frequency and same neck diameter, the Helmholtz resonator has the best results in terms of noise absorption compared to the quarter-wave resonator.

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Amal Abdulla Almekhrezi Alshehhi



Amal Alzaabi



Amal Alzaabi



Shamma Alsamahi

The Impact of Online Gaming on Female Students at UAEU

Noof Abdullah Salem

Introduction

Online gaming may be a popular leisure activity among university students. This research examines the impact of online gaming on female students at UAEU in terms of physical health, mental health, interpersonal relationships, academic achievement, and academic performance. It seeks to answer the question, ‘What is the impact of online gaming on female students at UAEU?’

Literature Review

Online gaming harms physical health. Long-time exposure to a screen without keeping a distance while online gaming leads to ocular discomforts, such as dryness, eyestrain, and blurred vision (Lee, Cho, Moon, Kim, & Yu, 2019). Additionally, screen time spent on activities, such as online gaming, can displace the time spent on physical activities (Maras, Flament, Murray, Buchholz, Henderson, Obeid, & Goldfield, 2015). Moreover, online gaming causes physical discomfort accompanied with neck and shoulder pains, headache, dizziness, and back discomfort (Lee, Cho, Moon, Kim, & Yu, 2019). Noticeably, online gaming drives to an increase in heart rate, respiratory rate, energy consumption, and diastolic as well as systolic blood pressure (Alshehri & Mohamed, 2019). In fact, many college students tend to play online games when they face difficulty in sleeping; however, that worsens the situation because the concentration during gaming and device light motivate the brain to produce neurotransmitter like norepinephrine and dopamine which keep

them awake (Kharisma, Fitryasari, & Rahmawati, 2020). Consequently, the poor sleep quality causes health risks related to weak memory and metabolism (Kharisma, Fitryasari, & Rahmawati, 2020).

Online gaming devastates mental health. There is a positive correlation between screen-based activities, such as gaming, and level of anxiety and depression, for different contributory factors, including social isolation, absence of physical activities, and possible cyberbullying associated with online gaming (Maras, Flament, Murray, Buchholz, Henderson, Obeid, & Goldfield, 2015). Furthermore, Online gaming is associated with mood swings and emotional variations because winning would result in a sense of satisfaction and achievement; however, losing brings negative feelings, such as anger and disappointment (Wong & Lam, 2016). Another serious drawback of gaming is the increase of aggressive behavior which was found positively correlated to the level of gaming addiction (Kim, Namkoong, Ku, & Kim, 2008).

Online gaming weakens interpersonal relationships. Excessive use of online games can shrink the social circle, as well as, it is associated with social isolation (Kim, Namkoong, Ku & Kim, 2008). People who use the internet excessively, such as online gamers, prefer to communicate through online chat whereas the real relationships seem stressful to them, so they alter it by engaging in the internet activities (Kim, Namkoong, Ku, & Kim, 2008). Similarly, there is a negative correlation between social introversion and electronic gaming, attributed to several factors, such as the feelings of belonging and satisfaction when escaping from face-to-face interaction to interaction and communication while gaming (Alshehri & Mohamed, 2019).

Online gaming lowers academic achievement. Students who spend much time on online games achieve lower GPAs than students who spend less time on online games as they waste sleeping and studying time on online games, so that reflects negatively on quality of the works (Weaver, Kim, Metzger, & Szendrey, 2013). Furthermore, students who intensively use online games suffering a decrease in grades; two hours per day spent on online games reduce the probability of achieving better grades in Mathematics and German by a factor of 0.8 than two years earlier (Gnambs, Stasielowicz, Wolter, & Appel, 2020).

Online gaming damages academic performance. There is a negative correlation between hours spent on gaming and academic performance, each hour on online games means fewer hours for assignments, projects, and extra-curricular activities (Cortes, Alcalde, & Camacho, 2012). Moreover, online gaming becomes with time a priority for the gamers rather than attending classes, concentrating on their tasks, and joining school activities (Young, 2009; Wong, & Lam, 2016). Indeed, students who are gaming, especially before bedtime, have poor sleeping quality, eventually, they are less alert and distracted during classes (Kharisma, Fitryasari, & Rahmawati, 2020).

Methodology

Firstly, I chose to conduct a research about the impact of online gaming on female students at UAEU due to the noticeable increase in engagement of students, including me, to online games. This is noticeable during the Covid-19 pandemic which resulted in a lack of physical activities, and difficulty in reaching the entertainment destinations. In contrast, negative consequences related to physical health, social life, and academic performance have emerged

owing to online gaming.

Secondly, I developed the five following controlling ideas: physical health, mental health, interpersonal relationships, academic achievement, and academic performance since they cover the aspects of student's life that might be affected by online gaming.

Thirdly, I formulated ten survey questions, two for each controlling idea to test the relevance and reliability of the controlling idea to the topic. Additionally, I developed six interview questions aiming to figure out the impact of online games based on students' experience. Then, I asked ten female students to complete the survey, and based on the results, I chose six of them to interview.

Fourthly, I looked for available credible resources that provided me with the knowledge and findings of the previous research about the impact of online games on each controlling idea. Then, I used them to write the literature review.

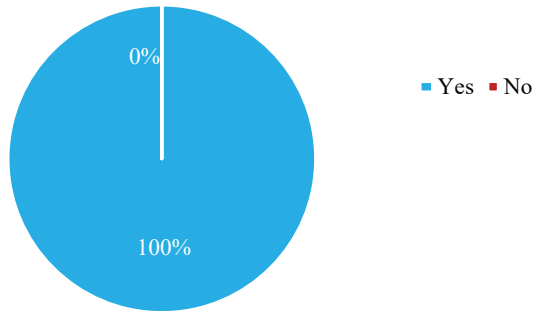
Fifthly, I gathered the results of the survey after repeating them two times to get more logical results and I represented them on pie charts using Excel. Based on survey results, I collected the required supporting explanations and quotes of the interviewees. Then, I processed and compared my results with the literature review to include them in the discussion.

Sixthly, I wrote the conclusion which summarized the results and indicated the difficulties I faced while gathering the data as well as my personal opinion about the topic. After that, I wrote the methodology, besides, I included the

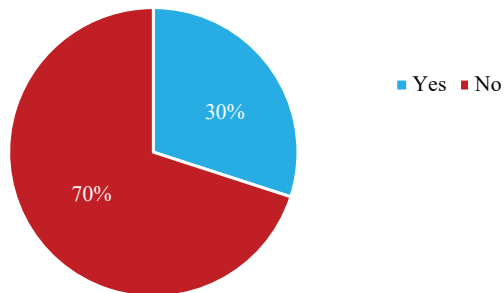
reference list and appendix. During the whole process, I frequently asked my instructor for feedback to refine my writing. Finally, I submitted my research paper.

Results

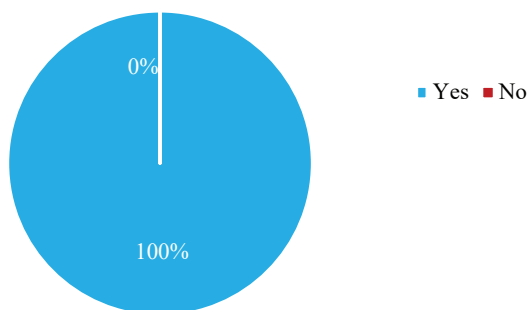
1. Does online gaming impact your physical health?



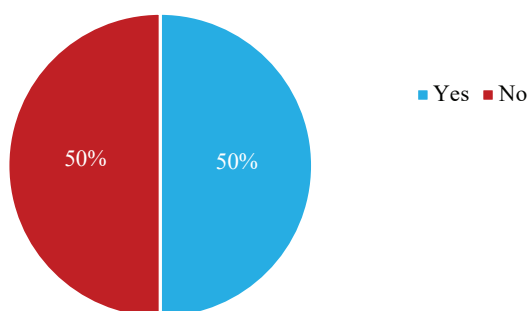
2. Does online gaming have a positive impact on your physical health?



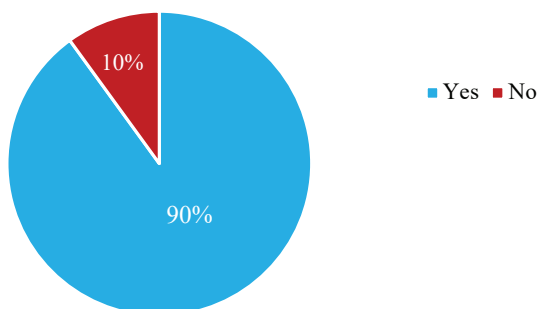
3. Does online gaming impact your mental health?



4. Does online gaming have a positive impact on your mental health?

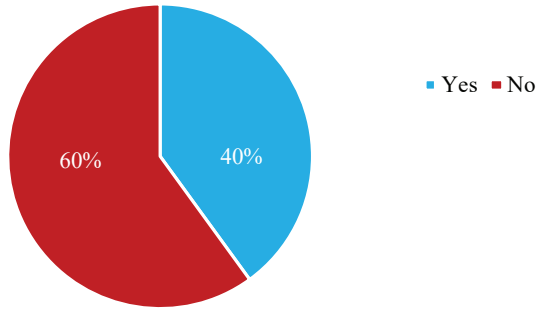


5. Does online gaming impact your interpersonal relationship?

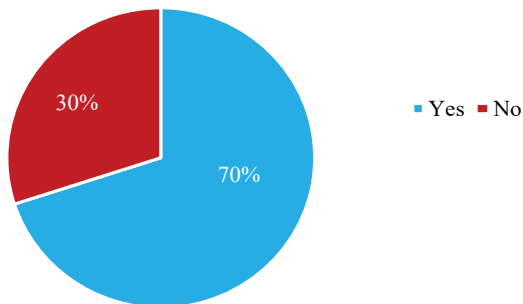


6.

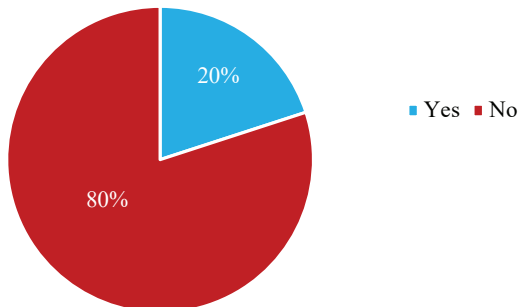
6. Does online gaming have a positive impact on your interpersonal relationships?



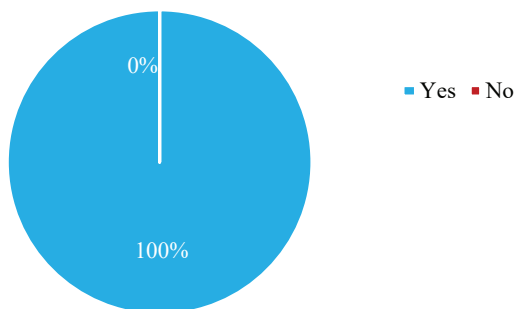
7. Does online gaming impact your academic achievement?



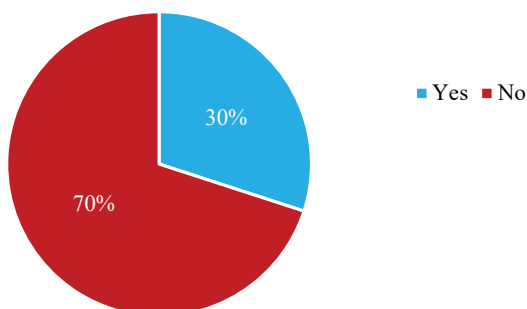
8. Does online gaming have a positive impact on your academic achievement?



9. Does online gaming impact your academic performance?



10. Does online gaming have a positive impact on your academic performance?



Discussion

Online gaming harms physical health. In response to survey question 1, “Does online gaming impact your physical health?” 100% of the respondents answered Yes. In response to survey question 2, “Does online gaming have a positive impact on your physical health?” 30% answered Yes whereas 70% answered No. Most of the interviewees confirmed the association of online gaming with physical health problems. One respondent said that when she plays for a long time, she feels “pain in my arms and in my muscles and in my neck and back” due to holding the device. Another respondent who used to

play for long hours a day mentioned, “My eyesight was not good as before,” and that she started to “suffer from eyestrain.” Another respondent who is so pumped up during online games described, “My heart beats faster and faster and my breathing increases,” so she sometimes feels “heart murmurs and chest pain.” These responses are in line with Lee, Cho, Moon, Kim, and Yu’s (2019) conclusions that online gaming results in physical pain and eyestrain, and Alshehri & Mohamed’s (2019) findings that online gaming increases heart rate and respiratory rate. In contrast, a respondent suggested that online gaming can positively impact physical health in such ways. She said that there is a variety of online games that include engaging physical activities, such as VR games where she can “move and interact with the environment like dancing, boxing, and throwing bombs or running away from enemies.” This response is contrary to Maras’ et al. (2015) finding which demonstrates time displacement of physical activities by online gaming.

Online gaming devastates mental health. In response to survey question 3, “Does online gaming impact your mental health?” 100% of answered Yes. In response to survey question 4, “Does online gaming have a positive impact on your mental health?” 50% answered Yes whereas 50% answered No. Most of the interviewees affirmed that online gaming is a double-edged sword when it comes to mental health aspects. One respondent said she “became an aggressive person,” and therefore, she is always ready to “start up a fight out of nowhere.” Another respondent said that after long time of gaming, “I feel I had wasted my time” which could be better spent with family or doing homework. Eventually, this feeling leads her to “regret that and feel sad and depressed.” These responses are consistent with Kim, Namkoong, Ku, and Kim’s (2008) findings that aggression is related to gaming addiction level and Maras’ et al. (2015) findings that link online gaming to depression. On

the other hand, a respondent said, “When I feel negative and sad, I directly go to play online games” as a method to “get myself out of the bad mood,” and “feel happy.” Similarly, another respondent usually draws on gaming to “get rid of stress, anxiety, and negative energy.” These responses are in contrast to Wong and Lam’s (2016) findings who relate mood swings to online gaming and Maras’ et al. (2015) conclusion that online gaming leads to anxiety.

Online gaming weakens interpersonal relationships. In response to survey question 5, “Does online gaming impact your interpersonal relationships?” 90% of the respondents answered Yes while 10% answered No. In response to survey question 6, “Does online gaming have a positive impact on your mental health?” 40% answered Yes whereas 60% answered No. Most of the interviewees revealed that online gaming negatively impacts interpersonal relationships. A respondent said, “I don’t have time to communicate or chat with my beloved ones,” so “it made me isolated.” Another respondent mentioned that her friends noticed that she is “no longer involved in any of activities” they used to do together. That effect has even extended to her family and she is “less interacted” with her family. She said, “I usually skipped the meals that we used to enjoyed as a family,” and instead, “living in that virtual world.” All these previous responses match the findings of Kim, Namkoong, Ku, and Kim (2008), besides, Alshehri and Mohamed (2019) that online gaming can shrink social circle leading to isolation by escaping real life interaction to online interaction during gaming which is preferable to some gamers. On the other hand, other interviewees thought that online gaming can positively impact interpersonal relationships. A respondent who thought that online gaming provides an opportunity to make new friends reported that she has “many friends from different countries thanks to online gaming.” Similarly, another respondent believed that online gaming can “keep friends

in touch.” For example, “During Covid-19 quarantine, online gaming was the only entertainment activity I could do with my friends.” These responses differ from earlier findings of Kim, Namkoong, Ku and Kim (2008) as well as Alshehri and Mohamed (2019) about the positive correlation between social isolation and online gaming.

Online gaming lowers academic achievement. In response to survey question 7, “Does online gaming impact your academic achievements?” 70% of the respondents answered Yes while 30% answered No. In response to survey question 8, “Does online gaming have a positive impact on your academic achievement?” 20% answered Yes whereas 80% answered No. The consensus was that online gaming has either a negative impact on academic achievement or no effect. A respondent who used to make an academic goals list before each semester said that she found herself in “complete chaos,” and she is “no longer achieving them.” She added, “I started studying for exams at the very last minute,” so she “got lower grades than expected.” Another respondent said, “My grades have decreased,” and she used to attend workshops, but with gaming, she became “less active in competitions and workshops.” These findings corroborate Weaver, Kim, Metzger, and Szendrey’s (2013) conclusion that students who are gaming get lower GPA. However, another respondent saw no relation between her academic achievement and online gaming. She said, “I can control how much do I waste on online gaming,” so she has time for other academic priorities, such as “preparing for exams” so her GPA was not impacted by online gaming. On the other hand, an interesting response from one interviewee who is a mechanical engineering student was that “an online game in PS4 helped me to raise my grades in labs courses.” It enabled her to “see engines, using machines, and fixing cars.” This finding contradicts Gnambs, Stasielowicz, Wolter, and Appel’s (2020)

conclusion which suggests that gaming renders students to suffer a decrease in their grades.

Online gaming lowers academic performance. In response to survey question 9, “Does online gaming impact your academic performance?” 100% of answered Yes. In response to survey question 10, “Does online gaming have a positive impact on your academic performance?” 30% answered Yes whereas 70% answered No. Most of the interviewees believed that online gaming harms academic performance. A respondent said that she is “no longer paying attention to what is being explained during classes,” and this is due to being “busy-thinking about particular gaming” that she has to win tonight. As a result, she “can’t even answer question being asked during the lecture” and her work is “unorganized.” Another respondent faced “difficulty in managing time,” and she said, “Once I start gaming, I can’t control myself, and I crave for more gaming hours.” Eventually, she ended up “having no time for assignments and tasks.” Another respondent stated that gaming before sleeping causes difficulty in falling asleep, so in the morning, she doesn’t “have energy to focus” or “participate in discussion in morning classes.” These responses align with Cortes, Alcalde, and Camacho’s (2012) findings that the more gaming time, the fewer hours spent on academic tasks. Additionally, it is consistent with Kharisma, Fitryasari, and Rahmawati’s (2020) findings indicating that late-night gaming leads to loss of concentration during classes. In contrast, a respondent said that online gaming improved her academic performance by acquiring new skills, including “creativity, building strategies, and being focused and patient.” This response contradicts Cortes, Alcalde, and Camacho’s (2012) findings that academic performance is negatively correlated to online gaming.

Conclusion

The research question was successfully answered. A significant finding to emerge from this research is that online gaming can damage physical health, mental health, interpersonal relationships, academic achievement, and academic performance.

There were some difficulties and limitations while conducting this research. Firstly, the shortage of available resources related to the impact of online gaming on academic achievement, and most of them do not consider aspects of academic achievement other than grades and GPA. Secondly, it was a bit difficult to reach female gamers since gaming is not common among females. Thirdly, I had to repeat the survey two times to get more accurate logical results. Further research is required to be carried out to understand the correlation between gaming and academic achievement.

I usually play online games for 1 or 2 continuous hours in my free time, especially with the lack of physical activities and avoiding meeting with friends during the Covid-19 pandemic. I have noticed a rise in physical problems, including eyestrain and muscle pain. Furthermore, online gaming in late nights usually lessens my concentration and participation during classes. When I get too engaged during online gaming, I postpone other priorities, such as my assignments, tasks, and spending time with my family. As a student who spends much time on online gaming, this research has increased my awareness about the possible negative effects of online gaming. Thus, it has encouraged me to manage my gaming hours and spreading awareness of the risks of intensive gaming among my siblings and friends.

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Appendix A: Research Tools

Survey

By completing this survey, you are consenting to participate in this research project. You will remain anonymous. The researcher will maintain the confidentiality of your data, and all data will be destroyed at the end of the semester.

RQ: What is the impact of online gaming on female students at UAEU?

SURVEY QUESTIONS

Does online gaming impact your physical health?	Y	N
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Does online gaming have a positive impact on your physical health?	Y	N
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Does online gaming impact your mental health?	Y	N
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Does online gaming have a positive impact on your mental health?	Y	N
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Does online gaming impact your interpersonal relationships?	Y	N
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Does online gaming have a positive impact on your interpersonal relationships?	Y	N
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Does online gaming impact your academic achievement?	Y	N
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Does online gaming have a positive impact on academic achievement?	Y	N
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Does online gaming impact your academic performance?	Y	N
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Does online gaming have a positive impact on academic performance?	Y	N
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Interview Questions

RQ: What is the impact of online gaming on female students at UAEU?

1. What impact does online gaming have on your physical health?
2. What impact does online gaming have on your mental health?
3. What impact does online gaming have on your interpersonal relationships?
4. What impact does online gaming have on your academic achievement?
5. What impact does online gaming have on your academic performance?

e-GDD Health Care System

By Noorah Alharthi & Siva Sudha Tanga

Supervised by Dr. Maria Campo-Redondo Iglesias

INTRODUCTION

Global Developmental Delay (GDD) is a neurodevelopmental condition identified in children with delays in physical, cognitive, and socio-emotional dimensions. Early attention and detection can help to bring back the balance in the development phase of the children. If not identified or delayed in detection, this can lead to many psychological, physiological, and anatomical impairments. Though scientifically proven that GDD can cause various chronic impacts in the later stages of a child's life, it is still not considered a medical emergency. It has human assessment dependency at every stage and most parents are not educated enough about children's overall developmental process, milestone delays, and their impacts. Since late detection is the primary cause for poor recovery to bring back the GDD affected children to normal life, there is a critical need to find an alternative solution for the human assessment process. Technological intervention in psychology can take the human's role, fulfilling the initial stages of the GDD screening job, and more involvement of technology can pave an innovative path for automating further screening methodologies.

This innovation is all about early detection and identification of GDD through the technical path by utilizing highly advanced Artificial Intelligence (AI) and Machine Learning (ML) technologies to fulfill the robotic processes as they are proven to replace manual works. An efficient information-fed technical system can accurately do the screening job, applying the same

principles.

Since knowledge has a predominant role in the delays, this innovation closes the knowledge gap on GDD and promotes awareness in society and helps GDD affected families in the home treatment process. The current innovation idea is not only helpful for the affected families but also beneficial for the health organizations, enhancing mental health systems so that full-fledged screening, diagnosis, treatment, and results are captured at every stage of the process. Since it is considered to have a wider impact in society, it is advised that the government run this program under their healthcare services umbrella either directly or via Public-Private Partnership (PPP) mode, boosting the importance of mental healthcare organizations. Since the idea covers the end-to-end process of GDD handling, all the stages of workflows can be implemented with health department controlled Key Performance Indicators (KPIs). Utilization of the suggested technical path helps to scale-up the rapid solutions to various other mental health conditions as well. Taking psychological inputs to the technical advancement can be a technical revolution in the clinical psychology treatment process, and these new methodologies help nations to build progressive, mentally healthy, and productive generations.

GLOBAL DEVELOPMENTAL DELAY

Global Developmental Delay (GDD) is a serious mental health concern defined as a significant delay in two or more domains of physical, cognitive, socio-emotional behavior, and daily life activities for individuals under five years old. GDD identification is scientifically associated with milestones delay. Delay in identification can cause learning difficulties, functional impairments, and behavior problems in later stages of life. Opportunities for early intervention are the only solution for better treatment and results.

Further delay in identification leads to negative/poor results in treating the impacts.

According to DSM-5 Global Developmental Delay (GDD) falls under the umbrella of neurodevelopmental disorders. It is diagnosed when a child fails to meet expected developmental milestones processes in various areas of intellectual functioning. Children who are incapable of getting through the systematic evaluations of intellectual functioning (including infants) who are unable to participate in standardized testing are labeled with this diagnosis (GDD). An acquired trauma during developmental duration might result in having an intellectual disability, such as an intense head injury, could lead to a diagnosis of neurocognitive disorder. Because GDD is diagnosed in children under the age of 5 years, this category of age is required to be reassessed after a period. The disorders that fall under the neurodevelopmental category tend to manifest in the early developmental period, such as in pre-school children, and they can be deficits. Deficits lead to impairments of adaptive functioning, such as when a child fails to meet the criterion of personal independence and social liability in several aspects of daily life, including social interaction, communication occupational, or academic functioning whether in-home or in the community settings (American Psychiatric Association, 2013).

Children with developmental delays are identified through three main procedures: routine developmental observation or screening, parental concern, and pre-school childcare provider concerns. A child's health manual can be a beneficial source that should be utilized cautiously by parents and clinicians to surveill the child's developmental milestones. It's important to educate parents to utilize the health manual of developmental checklist to identify developmental delay earlier (Choo et al., 2019).

CURRENT DIFFICULTIES IN HANDLING GDD

GDD is not a well-versed topic in society, as even parents are not educated enough about childhood development processes or milestone delays and their impacts. The typical reason for the delay in GDD identification is the parent's knowledge gap. GDD is not considered serious as other pathological health issues as it has lower priority in public health policy, and diagnosis is still highly dependent on the human evaluation process. There is no automated screening mechanism for the early identification of GDD in children. Therefore, there is a critical need for a global strategy on GDD from the World Health Organization (WHO) as it should be cost-effective for screening purposes. Some common barriers preclude early identification of developmental delays, such as family denial, lack of awareness leading to refusal regarding the referral, and socioeconomic status (Choo et al., 2019).

The statistics of GDD affected children describe the ground reality of how nations are losing potentially productive individuals who could otherwise serve their nation and contribute to society's overall development. Individuals with a diminished mental health state cannot take an active role in society.

Narrowing the gap between early detection and the growing population of children who suffer from developmental delays should be a global strategy introduced by the World Health Organization. The strategy should be implemented through a wide understanding and knowledge of children's cultural development according to specific region/geo-biological conditions (Scherzer et. al, 2012).

THE NEED FOR INNOVATION

Opportunities for early intervention can be lost if the developmental delays are identified belatedly, which will lead to negative/poor results in some domains such as learning difficulties, practical impairments, and behavioral problems. There is robust evidence-based research proposing that early

detection and intervention of developmental delays can produce positive results in children on a long-term pathway (Choo et al., 2019).

Early assessment and intervention are not just about further treatment for the child, but also about providing proper support for the family and the community. It is the first step on a long journey to make sure the necessary services are made available for every child to fly high as they create their impact on society.

Through this project, we suggest an innovation for overcoming current difficulties and human dependency and gaps in initial screening mechanisms by introducing highly advanced technologies. Information Technology & Communications (ITC) systems should be combined with the scientific methodologies of psychology to enable the GDD criteria and automate the initial screening process. To achieve the targeted goals, in addition to the advancement in the technology, we also need to work on implementation dependencies/resources and its process to be defined in the screening and treatment mechanism.

E-GDD HEALTHCARE SYSTEM

The proposal is a comprehensive automated screening and workflow-based solution to handle the end to end process of GDD cases from screening to treatment completion. The following pages show the entire business plan. The objective of associating a timer with human activity is to take prompt action within agreed timelines so that the essence of early identification leads to positive results. The smart tools proposed for automatic screening are highly dependable for the elimination of human dependency. Since GDD identification is not specific to one area of developmental delay, each tool in the program is specific to a specialized area of identification (Motion Sensors are for physiological and behavioral issues, Interactive tools and Robotic toys

are meant to observe mental functions of the child), so the required tool is subjective and based on the current social needs for setup and configuration. See Figure 1 on the following page.

RESOURCES FOR E-GDD PROGRAMS

Financial Aid:

Like any other innovation project, the proposed e-GDD Program requires adequate funding support from the respective authorities/government. The suggested e-GDD system can be implemented either on a small scale for a pilot run or less scope or be enhanced to fulfill all the needs of the GDD screening & treatment process.

Mental Healthcare Expertise:

The idea is to reduce human dependency and automatically identify the GDD cases among the community who could benefit from early detection. Thus, the proposed innovation system is highly dependent on mental health care expertise to provide the system's self-sufficiency to monitor the children.

Technical Expertise:

Wherever a human process is replaced with an automated one, it is obvious that highly reliable intelligent systems need to be in place to complete the task. When it comes to healthcare services, the level of expertise in healthcare and level of technical excellence and expertise drives the selection of the technology/technologies to at least match the average requirement of the need. Considering the current technological expertise available in the market, we have chosen the best possible solutions, providing technologies that can match the human assessment process. That is, artificial intelligence (AI)/machine learning (ML) based surveillance/monitoring systems for the screening and

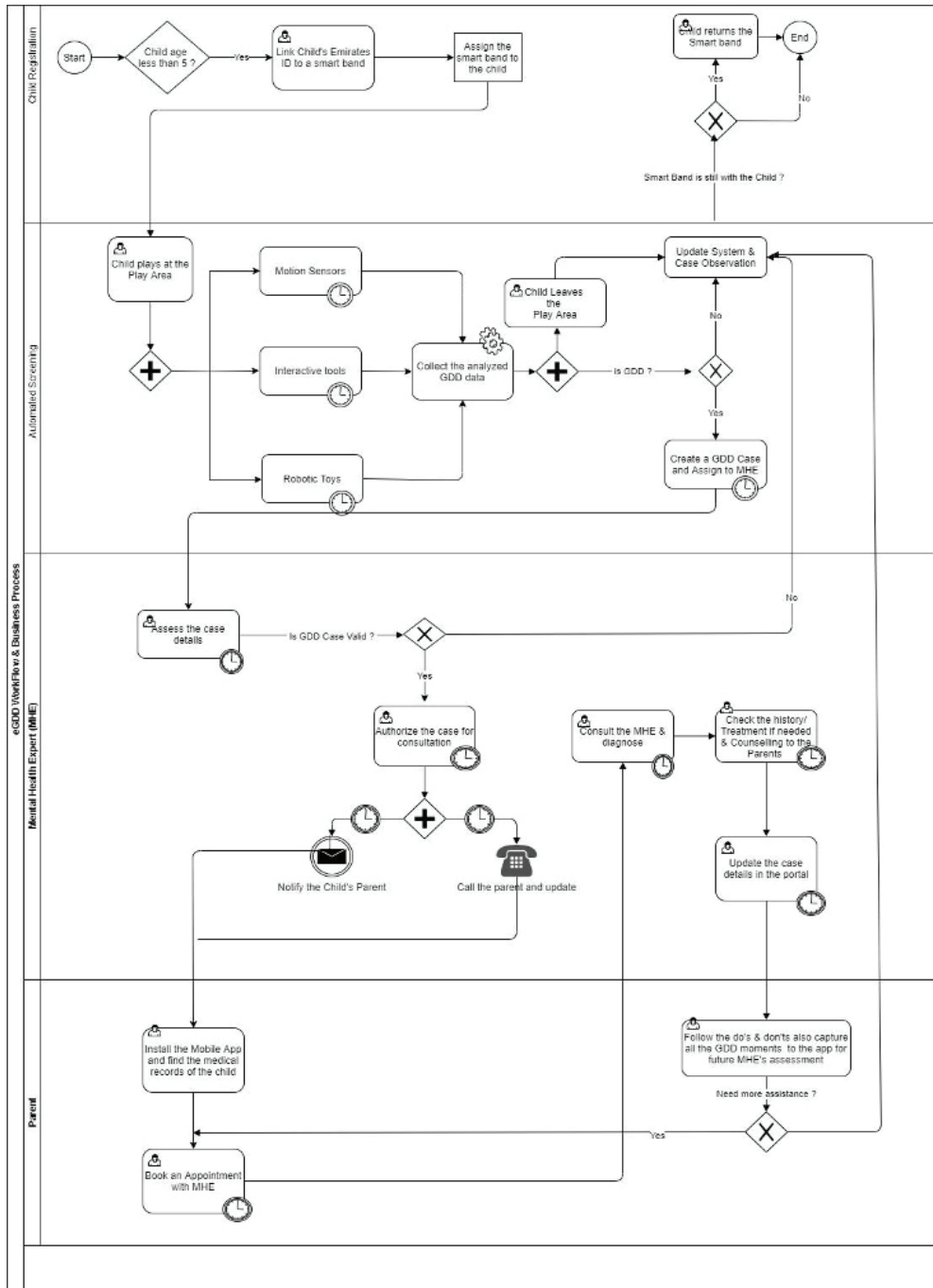


FIGURE 1. Note: 1. is a parallel activity, 2. is a conditional activity, 3. KPI Associated Task

evaluation of children's motions or actions, and robotic technologies for the assessment of thinking capabilities of children.

Mobile applications should be developed for convenient delivery of information and construction of a knowledge base. Workflow and KPI enabled Web applications should be in place to integrate and collaborate with various healthcare stakeholders like the Health Department, hospitals, insurance companies, and third-party agencies of insurance companies (TPAs).

Functional Inputs:

Given that the targeted screening is for children under five years old, technology needs to be fed with the functional inputs to perform monitoring activities. Normal & Abnormal activities of the child as per the GDD to be well-defined and provided as inputs for the monitoring systems for self-assessment readiness.

Monitoring Criteria:

All the required criteria to be well-defined and updated in the systems.

Child Identification:

An automated assessment can be performed irrespective of the child, but the treatment process needs the identification of the child to initiate further assessment or diagnosis & treatment procedures.

Information/Knowledge Base:

Since the knowledge gap among the community and parents is one of the key factors for GDD, education and awareness is an important activity. A platform for the sharing of accessible information is required.

Treatment Process:

A systematic and regulatory approved treatment process & case-by-case basis applicability to be up-to-date in the system. It should be well-integrated with existing healthcare platforms and departments for data availability.

Tracking Mechanism:

From initial identification to the completion of treatment, results to be tracked and data to be provisioned for the health departments as well as parents of GDD children.

Automated Process:

Assuming the automated monitoring process is the need, data collection is the key for systems to analyze and assess the objects (children). Also the collected data and further treatment process to be implemented in a workflow mechanism to go through various stages of identification, assessment, counseling, diagnosis & treatment processes. All these to be provisioned under the workflow mechanism to trace the case study from the beginning to completion of treatment.

KPIs as per Health Department:

For any service activity that is associated with human action to be equipped with Key Performance Indicator (KPIs) for better service levels and positive results as accountability takes place in each stage. Based on the department's agreed SLA/KPIs enabled in the workflow process, complete a GDD case identification until the completion of treatment according to the stage and level of condition of the identified child.

Devices Installation Location:

Since the targeted monitoring objects are children under five years old, it is advised to use public facilities like Parks/Play zones/Play areas to be equipped with the monitoring tools. Whoever enters the facilitated areas to be registered with their identity for further screening and evaluation procedures.

Program Ownership:

In terms of community benefits and productive future generations, such a project cannot be done better by anyone else but government. We suggest the Government/Health department take up the project and help citizens and expats living in the nation.

STEP1: AUTOMATED GDD SCREENING AT PLAY AREAS

Step1 is the key and critical stage for the proposed program to eliminate human dependency for the initial GDD screening process so the delay in identification can be avoided. The suggested e-GDD is an automated process which takes care of screening mechanism as well as initiating a workflow for GDD cases in the health system where further GDD assessment and treatment process is carried forwarded at a mental health facility by experts. The step-1 process is described in Figure 2.

To meet the GDD screening requirements, e-GDD is suggesting the use of various smart tools to collect data and monitor children for real-time analysis as well as helping in the data capture & content readiness for the further assessment process. Below mentioned is the data capturing process using smart tools.

Identity & Vital Information:

Identification of the child and collection of the child's vitals (BP/HR etc.)

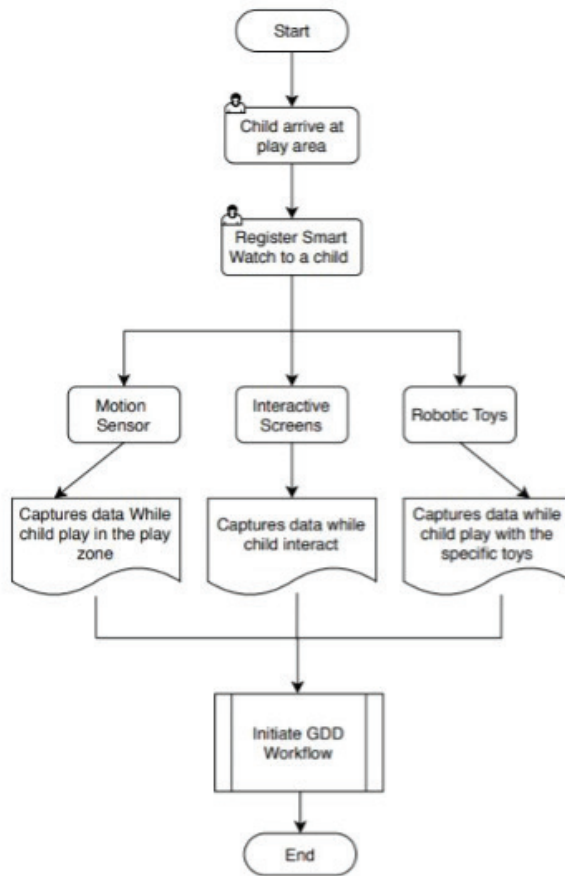
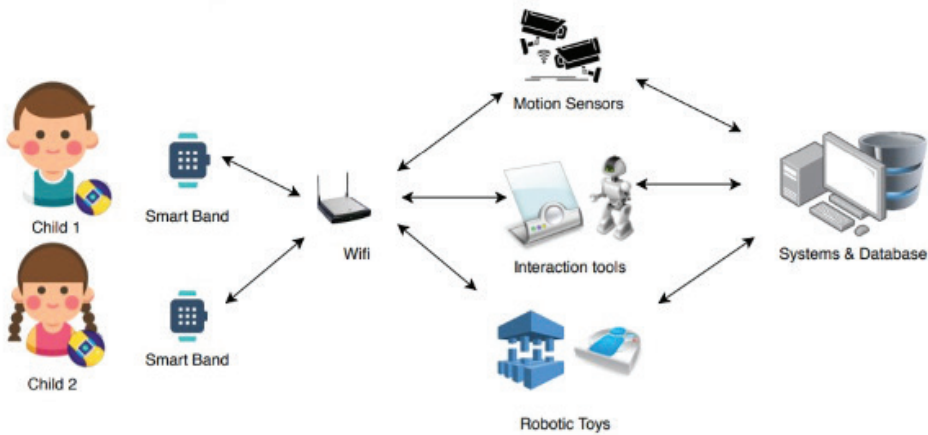


FIGURE 2. Automated Initial Screening Process at Play Areas

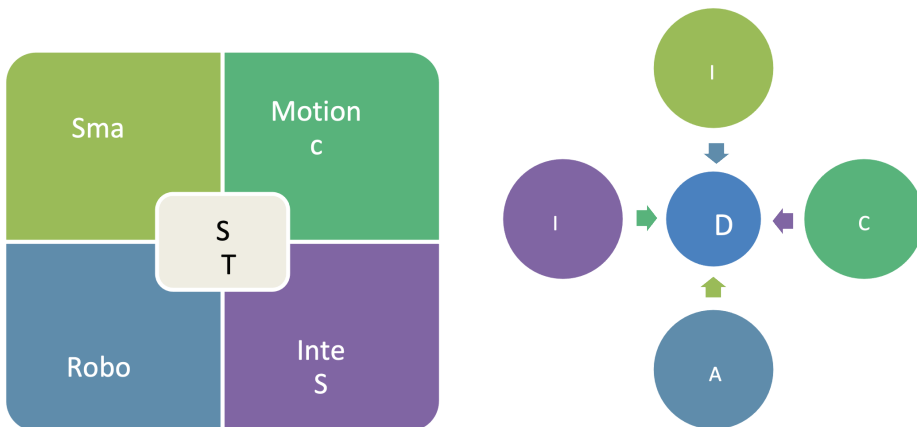
are key in the initial data collection process. Reusable & temporary smart bands that can be tagged with an ID number and can gather the vitals of the child need to be provided to play areas visited by children. To issue the band, the parent/guardian registers the band with the respective child's Emirates ID which updates the system with details such as name, parents' data, nationality, age, contact details, face recognition or photo of the child, etc, then collects vitals such as pulse rate, heart rate, etc., in real time. These smartwatches are expected to interconnect with all other associated monitoring devices with the

eGDD automatic screening process



help of Wi-Fi technology.

Since the Wi-Fi enabled smart bands are active during the child's playtime within the play zone, those bands are expected to pass the relevant/required data to the other monitoring devices seamlessly. Though the other monitoring smart tools are independent in monitoring mechanisms in nature, for the identification purpose each child's band helps to link the captured data/analysis to the specific child only.



Cognitive – Physical & Emotional Activities Detection:

GDD describes the physiological and emotional quotient of the child

according to the age-abnormal physical movements, growth issues, or aggressive acts which are usually observed during the assessment time by the human observation process. Those criteria are to be automated by utilizing available artificial intelligence (AI)/machine learning (ML) based motion detection sensor cameras. Similar cameras are used in the public's day-to-day life for security monitoring, object detection, movement detection as well some audible sounds detection purposes like baby cry detection, etc. Such technical expertise could be combined with GDD's scientific inputs to enable the automatic detection of the children's physical movements and social behavior patterns within the play zones.

With the help of such AI/ML technology based motion-sensing cameras, children's primary anatomical/physiological factors like postures, movements, and body articulation, etc., as well as emotional factors like object throwing, aggressive moves and fighting, crying and shouting, etc., can be captured for milestone delay identification. Whenever such abnormal acts are noticed by the system, it will automatically capture the child's data from the smartband, recording as well each moment considered abnormal. The sound detection sensors are associated with the motion sensors to identify who is behaving abnormally and records the required data and videos.

Cognitive – Visual/Speech/Language/Memory/Attention/Decision-making Difficulties:

Some cognitive difficulties can be observed during a conversation. For example, when a child faces difficulty in vision or speech, it is obvious that the child isn't responding fluently or accurately according to his/her age. Such delays need interaction with the child to understand if he/she can see, percept, and respond clearly, or not, according to their age limit.

As part of e-GDD's automation process, we choose the interactive

screens as a replacement for human interaction with children and understand their visual, speech and linguistic capabilities. As most children are well acquainted with smart gadgets, we suggest installing interactive screens/robots in play zones. Such screens/robots are expected to be loaded with popular cartoon characters and interactive questions & answers or pictures or stories appropriate for the child's age to attract them. Given that a child will spend some minimum amount of time at the screen, it is also advised to place weight and height measures in the screen/robot place where the child stands to do so. AI/ML-based interactive screens help to assess vision, recognition, and speaking and language skills based on the level of interaction with the child. Those screens collect the child's details utilizing the smartwatches. Interactive screens/robots would need a voice recognition intelligence to understand what the child says with precision. Given that ex-pat children are many in a country such as UAE, and that dialect and accent varies from child to child, the system should be intelligent enough to give a correct assessment. Such challenges need to be well addressed during the system implementation. Application of memory techniques will help the system to understand the children's memory capabilities and recall levels when a series of memory technique patterns are applied and practiced. Also, the level of concentration and attention the child shows while interacting with the screen/robot also can be assessed. Using certain games appropriate to the age of the children will also help to assess decision-making skills.

Cognitive-Motor Skills:

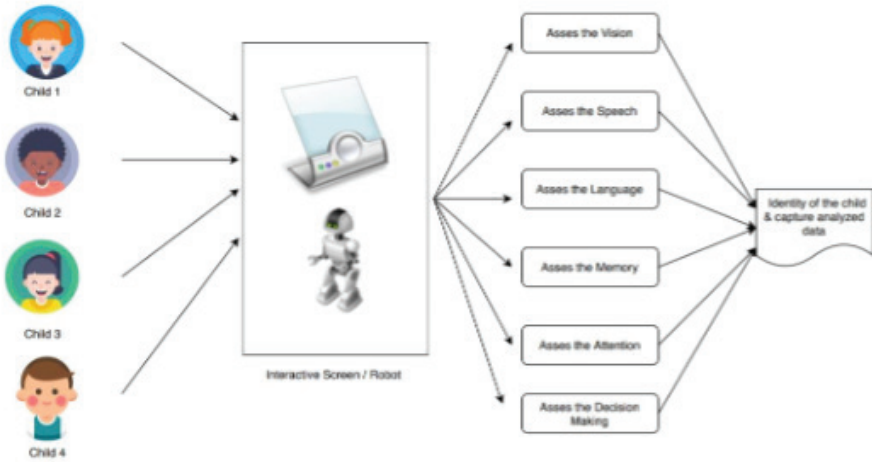
According to their age, children are expected to adopt the required sensory-motor skills. Robotic toys can be used for assessing the learned motor activity and executive functions of the child. Thinking capabilities can be assessed based on the toys' usage and assembling methods etc.

STEP2: MENTAL HEALTH EXPERT'S ASSESSMENT & COMMUNICATION PROCESS

Qualify the GDD Cases:

Since the data is completely recorded, identified cases to be re-observed by mental health experts to quality as GDD.

Automatic assessment through child interaction system



Communication Channel:

Following initial screenings of qualified cases, parents need to be contacted using the details available in the system about the need for the visit to the mental health facility center for further child's assessment process & family counseling. This communication service is part of the proposed workflow (SMS & IVR based prerecorded call) or it can be clubbed with the exiting healthcare department call centers too. Following the communication, parents should be given an option to book an appointment through the mobile app & website for the nearest mental facility or department-approved hospital for further process. Alternatively, parents can request appointments through a call center facility.

STEP3: TREATMENT PROCESS

Counseling:

Despite the advanced nature of the health system, any child's best productive environment is at home. The treatment process starts with counseling the family first, so educating the family members and guiding through repeated counseling sessions would be the best process to make any GDD affected child's home environment more child-friendly and understanding. All closely associated family members should know about the GDD and how impacts any child's personal, social, and productive life. For cases detected early, family members with adequate education on Do's & Don'ts and How-to care can show concern towards GDD affected children and help them face all the odds and have a positive result on the child's life. Following the communication, parents are expected to adhere to the health authorities' follow-up process in the GDD Diagnosis and Treatment Plan.

Treatment & Patient Record Maintenance:

In case there is no existing web application for GDD with the mental health felicities/department, then a well-defined GDD specific web application needs to be built to maintain the record right from the initial screening process until completion of treatment.

Since the e-GDD screening is an alternative mechanism for the manual screening process, registration should be provided to the qualified users at the mental healthcare centers. The number of cases registered by the "e-GDD screening system" in addition to the manual registration process will cover the maximum available GDD cases in the community.

Key Performance Indicators (KPI):

Delay in identification is a major cause of failure in GDD treatment.

Additionally, timely treatment plays an equally important role once GDD is identified. So, to make sure all the treatment processes proceed according to expert advice, we assume that introducing KPIs as part of the treatment process plays a pivotal role in successful treatment. As and when the initial data is available, case registration should proceed automatically through the e-GDD process itself, so that the KPI based follow-up work can be assigned to the specific departments and the time-bounded actions to be updated in the system. Any deviations in the KPI are to be automatically reported to the concerned departmental higher management as part of an automated escalation mechanism.

Information/Knowledge Base:

For easy reference, it is necessary that parents to have information at hand always. To fulfill such information requirements, we suggest building a mobile app for the parents, with information on how GDD can be noticed at various ages/stages/acts of the children. App to be updated with before and after medical assessment Do's & Don'ts to mitigate the GDD problems. It should also be equipped with information on how to care for and capture the child's improvement/progress during treatment time. Once GDD is identified, its milestone delays and achievements can be captured for case study and medical advice purposes.

The suggested mobile app to be enabled/integrated with the respective mental health facilities for booking an appointment, parental access for uploading any of the captured child's acts at home, and to track the treatment and case history for the parents to utilize for any future treatment of psychopathological problems.

Research Data:

All the data collected in the above-mentioned process helps further research activities on GDD by the healthcare department. Also, data gives accurate analytics about the registration of the cases as well the treatment results in the community, and it shows the efforts from the authorities and the respective outcome of the efforts.

PROGRAM HIGHLIGHTS***Nation First:***

This project is meant for current & future generations, so any step taken forward will help the nation to build a mentally stronger youth who could contribute to the overall future growth. The results are helpful for the families of GDD children who are suffering due to the impacts, and they help the Government to build the nation with stronger and more productive generations to lift the country's pride higher.

Bulk Screening:

Automated screening tools can perform multi-child screening simultaneously (eg. motion sensor cameras) if the systems are well equipped & designed with multitasking activities. This system can be implemented as a whole or can be implemented in parts and can generate results in a short time. For example, only the interactive screens do the specific work of monitoring the cognitive mental condition. If only the motion sensors are considered, major physiological conditions can be monitored & defects identified.

Pilot Run:

For the benefit of implementation validation, as a pilot run, only smart bands and interactive screens/robots may be implemented and placed at play

areas, making use of GDD automation and an associated mobile application with simple guidance details to help the parents. This is a short term goal. Depending on the situation, it can be scaled up to the full extent with all the required additions as mentioned above.

Investment Friendly:

Since the flexibility of choice is available, investment decisions on the suggested program can be made easily according to the government's need. Additionally, it can be implemented in various phases, and each phase can be interdependent in the later stages.

Longevity:

Since the proposed solution has been advised to run or implement on the market trendy/futuristic technologies, it can last for the long term and serve for decades to fulfill the nation's GDD requirements.

Systems Integration:

The proposed project's technical capabilities can easily integrate with any of the existing systems (if any) so that it can fit into the Health Department's comprehensive solutions.

CHALLENGES

Just as every innovation has challenges, for this innovation we need a well-balanced process of technology where GDD functions are placed properly to achieve solutions & goals. Awareness in the community of mental health issues like GDD is less than the other physiological/pathological complaints. However, the overall importance of mental health dysfunctions and their consequences need to be highlighted by prominent world organizations.

Furthermore, the need for a mentally healthier future generation could take the nations to greater heights, so government authorities must focus more on the upcoming and future generations, running special campaigns/advertisements to educate the people through various mediums.

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Water



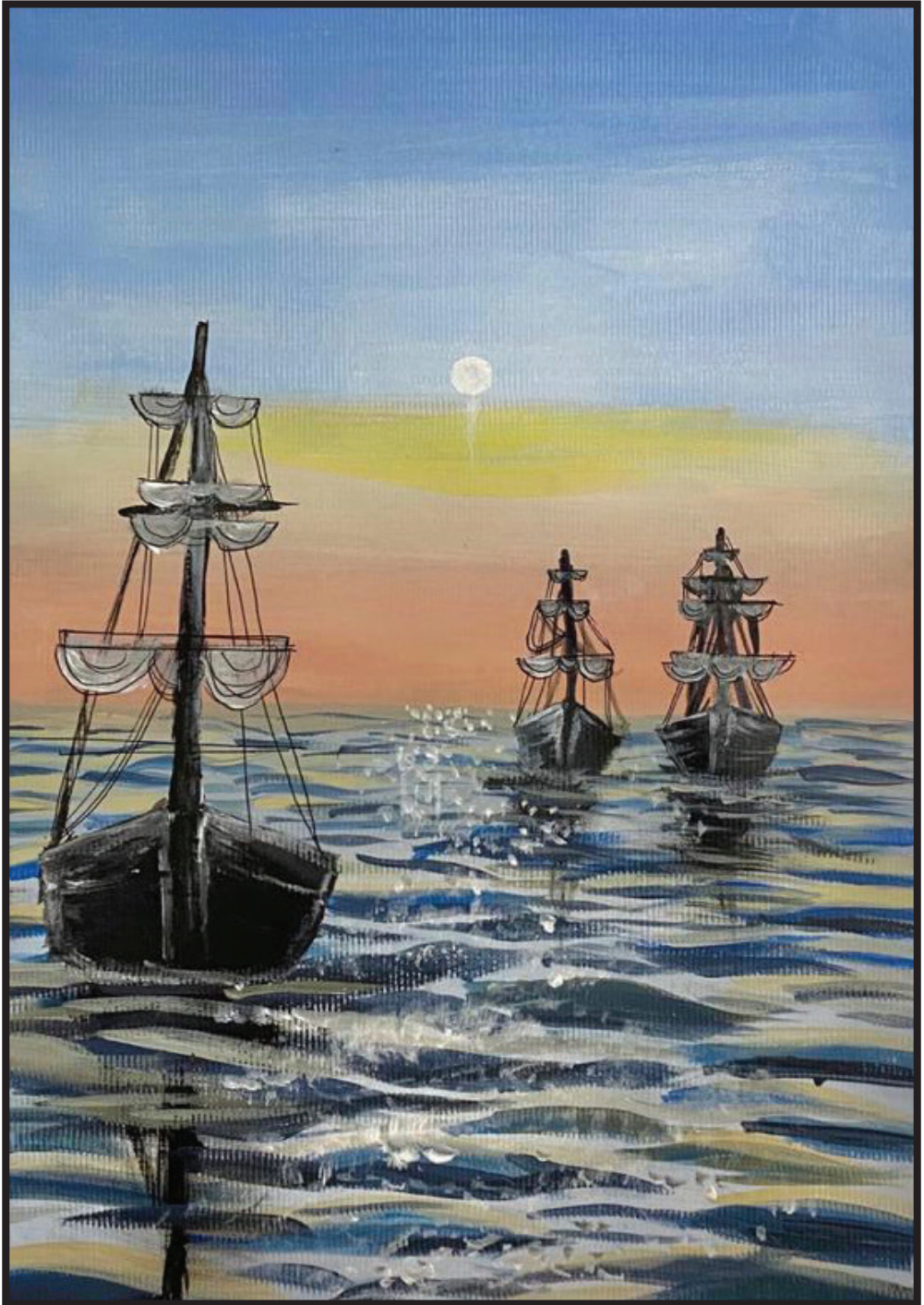
Fatima Salem Khamis



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Nanoparticles for Drug Delivery and Therapy

By Sondos Arabi

Introduction

Nanotechnology refers to an interdisciplinary field where scientists and engineers deal with small structures within the range of 1-100nm. Nanoparticles have unique physical and chemical properties compared to materials in bulk resulting in a plethora of biomedical applications, including drug delivery, bio-sensing, and tissue engineering. The technological tools available for characterization and fabrication enable scientists to modify the properties of nanoparticles based on the type of drug molecules and the location of damaged cells or tissues. For instance, some nanoparticles are coated with protein molecules to prevent agglomeration when injected into the bloodstream, resulting in a successful process of drug delivery. Nanocarriers have allowed for the delivery of therapeutic agents to a specific target in the patient's body, and have solved issues encountered using conventional drug delivery systems, such as high levels of toxicity and uncontrolled targeting and delivery of drugs.

However, designing nano-particle drug delivery systems is associated with challenges related to biocompatibility and induced toxicity. The selection of sizes, shapes, materials and surface characteristics takes both biocompatibility and therapeutic efficacy into account. This paper aims to describe the types and advantages of nanoparticle-based drug delivery systems and discusses the challenges facing this new technology that may result in limiting the fabrication of future nanocarriers followed by applications in delivering anti-cancer drugs and combined therapy.

Types & Advantages of Nanoparticle-based Drug Delivery Systems

Nanoparticle-based drug delivery systems are designed in various sizes, shapes, and physiochemical properties. Understanding the nature of interactions with drug molecules and biological systems determines the type of nanoparticles. Nanoparticle drug delivery systems can enter the patient's body by injection, oral intake, and annihilation (Li, Wang, Fan, et al., 2013). If these particles enter our bodies without functionalization they would be attacked by the immune and lymphatic systems before reaching the target.

Nanoparticles are divided into two categories, namely organic nanoparticles and inorganic molecules such as gold, polymers, dendrimers, quantum dots, and carbon nanotubes (CNTs). All nanoparticles are characterized by unique physicochemical properties such as large surface to volume ratio, thermal conductivity, and stability due to the nature of matter at the nanoscale. These properties can be modified based on the biomedical purpose.

In our case, drug delivery requires selective accumulation of drug molecules in the patient's body without inducing the toxicity that can diminish the therapeutic efficacy. As a result, some properties are enriched to enhance the biocompatibility of such drug delivery systems (De Jong & Borm, 2008).

The efficiency of a drug depends on the dimensions of nanocarriers. The size of nanoparticles falls within the range of 10-200 nm based on the site of the target and chemical properties of drugs. Smaller sizes of nanocarriers result in high drug loading capacity due to the large number of atoms at the surface. On the other hand, as the size approaches 200nm there will be a higher chance of destroying nanocarriers by the lymphatic system which inhibit releasing therapeutic agents (Syed & Ayman, 2018).

High loading capacities have solved the issues encountered when delivering chemotherapeutic agents by conventional systems, where a small portion of a predetermined dosages reaches cancer cells. Additionally,

nanoparticles' surface is modified to improve the biocompatibility of the system. For instance, hydrophobicity is one of the main characteristics of many nanoparticles due to the nature of chemical bonds between the atoms forming nanoparticles. Therefore, nanocarriers are coated with polymers when injected into the bloodstream. The presence of polymers makes the surface hydrophilic preventing instability or agglomeration in physiological solutions. Moreover, polymers can enhance biocompatibility, for example, Glucagon-like peptide-1 is a polymer-based nanocarrier used for delivering insulin. After releasing therapeutic agents, the molecules left in the bloodstream are decomposed naturally by plasma enzymes without inducing toxicity (De Jong & Borm, 2008).

The current extent of knowledge in nanotechnology has led to the development of smart drug delivery systems (SDDSs). Such systems change their properties based on environmental conditions due to the complexity of processes that occur inside our bodies and other external factors, such as exposure to light, ultraviolet waves, and high temperatures (Mirza & Karim, 2019). In contrast, conventional drug delivery systems don't take environmental conditions into account since dosages and concentrations of drugs are determined before the process of drug delivery, leading to lower effectiveness. For example, the use of nanocarriers for treating tuberculosis (TB), which is a disease caused by a type of bacteria called *Mycobacterium tuberculosis* attacking the respiratory system, has allowed for the enhancement of the carrier capacity and dosage control. Furthermore, targeted drug delivery lowers the chances of induced toxicity since the concentration of dosages is determined by environmental conditions which opens the door for pharmaceutical companies to reproduce drugs that were identified as ineffective using conventional drug delivery systems (Syed & Ayman, 2018).

Challenges Faced in Designing Nanoparticle-based Drug Delivery Systems

Designing nanoparticle-based drug delivery systems is associated with challenges related to biocompatibility and toxicity. Challenges faced while working with nanocarriers are not related to the current understanding of nanoscience. The physical and chemical laws such as quantum mechanics and surface chemistry that govern the process of fabrication and characterization are understood by material scientists, chemists, and physicists. Technical challenges are faced when testing nanoparticles for drug delivery, leading to low biocompatibility and increased toxicity (Goenka, Sant, and Sant, 2014). Biocompatibility of nanocarriers refers to the ability to deliver drug molecules without eliciting side effects in the patient's body. Nanocarriers are synthesized in different methods ranging from chemical reactions to mechanical processing such as grinding (Pathak & Thassu, 2009).

Studying the biocompatibility of nanoparticles requires an investigation of the nature of interactions of each type with cells and tissues. For example, semiconductors, nanocrystals or quantum dots are used to deliver drug molecules, but this process can trigger several reactions, such as blood cell aggregation damaging the plasma membranes of cells, resulting in lowered Hemocompatibility (Patra, Das, Fraceto, et al., 2018).

Toxicity of nanocarriers refers to the ability of nanoparticles to limit the functionality of human organs (Goenka, Sant, and Sant, 2014). Nanoparticle-based drug delivery systems have reduced the toxicity of chemotherapeutic drugs. However, there is a lack of knowledge about the induced toxicity of nanoparticle-drug systems due to the variety of synthesis methods and materials (Patra, Das, Fraceto, et al., 2018). Some in vivo studies have shown that metal-based nanoparticles increase the chances of toxicity and cause additional issues that were not encountered with drug delivery systems of

higher dimensions such as blood clotting, platelet aggregation, cardiovascular effects (Goenka, Sant, and Sant, 2014). For instance, gold nanoparticles can cause blood clotting due to their physiochemical properties which can be prevented via thermal radiation. Additionally, the ability of nanocarriers to cross the blood brain barrier (BBB) which refers to selective group of endothelial cells that allows certain solutes to cross into the extracellular fluid of the central nervous system can influence the nervous system (De Jong & Borm, 2008). For example, inhaled Manganese Oxide (MnO₂) nanoparticle can produce reactive oxygen compounds in the brain, resulting in Oxidative stress increasing the risk of developing neurodegenerative diseases such as Alzheimer's disease in the long term (Patra, Das, Fraceto, et al., 2018). There is still a need for further studies to confirm the reason for induced toxicity of nanoparticle-based drug delivery systems. The effect of lack of knowledge about the interaction with biological systems is still not clear.

However, clinical trials reveal that nanoparticles are ideal candidates for delivering anti-cancer drugs due to enhanced therapeutic efficacy and effective targeting of tumors, especially metal-based nanoparticles since they can be used for both drug delivery and diagnosis applications. In the future, the development of smart drug delivery systems or nanobots is expected to overcome induced toxicity encountered with nanoparticle-based drug delivery systems.

Applications of Nanoparticle-based Drug Delivery Systems

Cancer is one of the complicated biological phenomena caused by rapid divisions of cells resulting in the formation of tumors in organs such as kidneys, lungs, and bladder. The main approaches for cancer treatment are chemotherapy and radiotherapy. However, the side effects of such approaches can be debilitating. Chemotherapeutic agents are delivered in a process that lacks selective targeting where these agents kill any cell that undergoes rapid divisions, including hair

follicles and intestinal epithelium. Nanomedicine seems to solve this issue by taking advantage of the unique physicochemical properties of nanoparticles such as surface charge, stability, and particle size. For example, large loading capacity of graphene-based nanocarriers results in lowering the concentration of dosages since anti-cancer drugs will accumulate selectively around cancer cells.

Nanoparticles are fabricated using various materials which alters the chemical and physical properties of drug delivery systems (Goenka, Sant, and Sant, 2014). Organic molecules such as micelles and liposomes can enhance the stability of insoluble chemotherapeutic agents. Micelles are characterized by high stability, leading to minimization of tumor size with the minimum dosage concentration since micelles can enter cancerous cells through fenestrated vasculature. Moreover, some types of polymers such as Dendrimers are highly reactive due to the presence of functional groups at the edges allowing for loading various anti-cancer drugs (Syed & Ayman, 2018). Functional groups provide more biocompatible options for surface modification such as Polyethylene Glycol (PEG) which allows for delivering cytotoxic drugs without lowering the therapeutic index (Goenka, Sant, and Sant, 2014).

Nanoparticles come in different shapes such as ribbons, tubes, fibers, rods, and sheets which play a role in loading and delivering anti-cancer drugs. Carbon nanotubes are one of the highly used carbon-based nanostructures for biomedical applications. Carbon nanotubes (CNTs) are in the shape of hollow cylinders available in two forms, single-walled carbon nanotubes (SWCNTs) and multiwalled carbon nanotubes (MWCNTs). Both forms are characterized by hydrophobicity of the interior walls, which has been useful for loading insoluble anti-cancer drugs such Paclitaxel which has an aqueous solubility of around 0.2 $\mu\text{g/ml}$ (Syed & Ayman, 2018). Furthermore, functionalization of

CNTs is done by attaching biocompatible molecules on the large surface area of the outer walls. Another example is Buckminsterfullerene C₆₀ which refers to a spherical molecule composed of 60 carbon atoms in a cage like structure (Syed & Ayman, 2018). It has high chemical reactivity and it is expected to enhance cytotoxicity of chemotherapeutic agents. It has been tested on animals to study the effect of such structures on lowering cytotoxicity (Syed & Ayman, 2018).

Additionally, nanocarriers can be used in combined therapy for cancer treatment. Combined therapy refers to combining two or more treatment strategies to enhance the therapeutic efficacy of anti-cancer drugs. Targeted delivery of chemotherapeutic agents has been combined with photothermal therapy, which is the use of thermal radiation to transfer heat to cancer cells by a photothermal agent of good thermal conductivity (Goenka, Sant, and Sant, 2014). Graphene is a two-dimensional carbon-based nanostructure that acts as a photothermal agent and nanocarrier. For example, loading graphene sheets with Doxorubicin (DOX) followed by exposure to infrared radiation has been useful for reducing the size of tumors (Goenka, Sant, and Sant, 2014). Functionalization of the surface of graphene can be done by various numbers of oxygen-containing molecules (Goenka, Sant, and Sant, 2014). Nanoparticles can be used for combined biomedical applications such as drug delivery and diagnosis. The exceptional optical properties allow for detecting nanoparticle-based drug delivery systems after the release of the drug. Various types of nanoparticles are being tested, including organic and organic molecules.

Conclusion

Nanotechnology is a successful tool for designing drug delivery systems of exceptional properties that can treat chronic diseases and replace problematic

conventional systems. Materials used to fabricate nanoparticles are being tested to determine their biocompatibility and toxicity. Advanced tools play a role in enhancing the biocompatible properties of drug delivery systems since functionalization or surface modification can be done by various means, ranging from applying strong magnetic fields to forming chemical bonds with polymers. However, the fate of nanocarriers after releasing therapeutic agents is still not understood, requiring additional studies to solve this issue since the existence of such particles in humans may result in undesired reactions, the main reason for induced toxicity. Smart nanoparticle-based drug delivery systems are developed to control the process by releasing nanoparticles based on the environmental conditions. Special sensors are attached on the surface of nanoparticles. These systems are expected to be biocompatible since the existence of sensors can be used to direct nanocarriers upon the release of therapeutic agents. Multiple clinical trials and further studies are required before approval of new drug delivery systems can be obtained from the Food and Drug Administration (FDA).

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Factors of Long-term Unemployment Among Emirati Youth

By Alyazia Ali Ahmed Alkaabi

Supervised by Dr Tatiana Karabchuk

Introduction

Unemployment can be defined as the state of not having any job. The sum of unemployed and employed people makes up the labor force. The remainder contains people who have no work and are not looking for any. This group consists of homemakers, retirees, and students.

Unemployment is considered an important social issue in many countries all over the world for many reasons. It leads to negative effects on health, both psychological and physical, which tend to increase with duration.

According to the World Bank, in 2019 the estimated youth unemployment rate in the United Arab Emirates was 7.34 percent. The total unemployment rate was about 4%. Importantly, there is a big gender difference in unemployment rates: for men it is 7.9%, whereas for women it is much higher at 21.8%.

This paper explores the causes of long term unemployment among youth. It seeks to answer the question, “Why are some young people unable to find jobs, whereas others can easily find different job opportunities?”

Literature Review and Methodology

In recent years, there has been a sudden increase in the average rate of unemployment in GCC countries, including United Arab Emirates, Saudi Arabia, Qatar, Oman, Kuwait, and Bahrain. This increase is a consequence

of structural considerations connected to the low demand for skills, slow labor productivity growth, low attractiveness of foreign capital which may investigate the dynamics of the oil market and the migration of labor. The high level of unemployment in youth in Arabic countries in general is certainly connected to the manifestation of the crisis of development plaguing all countries, and it may illustrate the major challenges. There are many different causes and effects of the increase the level youth unemployment in Arabic countries, especially in the UAE. In GCC countries, the existence of youth unemployment is a big problem for training and educational systems which are important in the labor market.

The most important and notable feature of the GCC is that its member countries possess almost 45% of the world's proven oil reserves. The natural abundance of natural resources may increase the unemployment phenomenon and decrease the growth potential by reducing public and private incentives to accumulate human capital because of the high level of non-wage income, such as low taxes, social spending, and dividends (Auty, 2001; Eifert et. al., 2003).

The robust and strong growth of the United Arab Emirates in the last years has notably raised the living standards of citizens and created social and economic transformations. As a result, there are some concerns for the labour market in regard to quick and rapid growth which may or may not translate into equivalent job growth, especially among young nationals and those outside the public sector.

This paper uses a quantitative method to test the hypotheses on job search duration for Emirati youth. The main dependent variable was number of months for job searches and independent variables tested were gender, education and income. An online cross-sectional survey among unemployed youth (under 35 years old) was applied to collect the data of 234 respondents.

The sample was non-probability quota sampling and UAE residents were recruited from all seven emirates. This research project seeks to determine the length of time Emirati youth spend searching for a job, and the main reasons for the lack of success in gaining employment.

Results and Conclusions

Survey results show that males have shorter period of being unemployed than females. It means that there is significant relationship between the long term search for work and gender.

The following hypothesis regarding education was rejected: If a person has higher education then she/he would find job faster (stay unemployed shorter period) due to insignificant correlation. Thus it was concluded that there is no relationship between number of months of job search and education level.

High family income also did not show any association with the job search period, as the data did not show that high-income youth remained unemployed longer than low-income youth.

Initial statistics indicated that the unemployment rate among Emiratis at the end of 2011 was 12.8% (total 34750), of which 65% were youth and 72% female. Among the 65% of unemployed youth, 70% were female. Highest rates of unemployment were in Al-Fujairah (19.5%), then in Abu-Dhabi (15.1%), whereas the lowest employment rate was in Dubai (7%). In my own research, the unemployment rate in Abu Dhabi was 29.3 % and 18.3% in Dubai.

I want to emphasize that this study had limitations. Thus, we cannot generalize conclusions as the sample size was rather small and the sample was not random. It was a student study and some questions did not pass validity tests. I will develop my research in the future by increasing the number of respondents and improving randomization techniques for sampling.



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