

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

A Study on the Psychological Effects of Watching Superhero Films

¹Ms. Saritha S R, ²Mr. Baskar B, ³Shradha Murthy, ⁴Sunil Shivam Kartha, ⁵T. Shabaz, ⁶Shradha Jain, ⁷Shyam Mittal, ⁸Sakshi Jain

¹Assistant Professor, JU – CMS, ²Assistant Professor, JU-CMS ^{3,4,5,6,7} Semester 4, BBA, Sports Management, JGI- Jain- Center for Management Studies

ABSTRACT

In This study we try to explore the various psychological and physical effects of watching superhero films on audiences. The research focuses on the positive and negative impacts of these films and examines how they influence attitudes, behaviours, and perceptions on the viewers. The study found that recently, women are being positively depicted as superheroes in these films and that they provide motivation and inspiration to viewers. The research also highlights that some superhero films can be sexist and contribute to a culture of misogyny. Children are especially motivated by these films, which can have a lasting impact on their beliefs, values, and perceptions. Overall, the findings tries to access a relationship between the characters and their audiences and the role that these films play in shaping popular culture. This study finds a deeper understanding of the impact of superhero films on viewers.

Keywords: Superhero's, Over-The-Top, Films, Behaviour, Effects, Relationship, Viewers.

Introduction:

Superhero films have been a staple of the entertainment industry for decades and have captured the imagination of audiences all over the world. These films, which feature characters with extraordinary abilities and a strong moral code, have become a genre in their own right and have a dedicated following. In this study we try to find the effects of watching superhero films on the audience and determine whether these films have any positive or negative impacts on viewers and what those effects may be.

The history of superhero films can be traced back to the early days of cinema, when serials featuring characters like Flash Gordon and Buck Rogers captivated audiences. However, it wasn't until the release of the 1978 film "Superman" that the modern superhero film was born. This film, which starred Christopher Reeve as the Man of Steel, set the tone for what would become a thriving genre and launched a wave of superhero films that continue to this day.

In recent years, the popularity of superhero films has only increased, with box office records being shattered and critical acclaim being heaped upon these films. However, despite their popularity, there has been some research into the effects of these films on the audience. This study aims to summarize that data and explore the impact that these films have on viewers.

The research will focus on a range of effects, including the impact on attitudes, behaviours, and perceptions. The study will also explore the impact of superhero films on the broader culture, including the representation of gender, race, and class in these films and the impact of these representations on audiences. Additionally, the study will examine the influence of these films on popular culture and the role they play in shaping cultural values and beliefs.

The study will focus on the effects of watching superhero films on the audience and will explore both the positive and negative impacts of these films. This research will be based on a review of existing research in this area. The study will not involve original research but will instead rely on existing research papers to access data.

The study finds a relationship of superhero films and their viewers and will provide valuable insights into the impact of these films on audiences. This research will also provide valuable information for policymakers and cultural institutions, who can use these findings to inform their decisions about the role that superhero films play in popular culture.

In conclusion, we try to explore what the effects of watching superhero films could be on audiences and to determine whether these films have any positive or negative impacts on viewers. The research will be based on a review of existing research in this area and will contribute to a deeper understanding of the impact of these films on popular culture.

Objectives:

- 1. To study the meaning of superhero films in today's world.
- 2. To study and identify the positive effects of superhero films.
- 3. To study and identify the negative effects of superhero films.
- 4. To study the impact of superhero films on children and adolescents.

Review of literature:

1. Title - The Relationship Between Marvel Female Superheroes and Young Girls

Author - Nyla Hussain

Year of publication - 2022

Summary- A good way to understand the connection between young girls and woman superheroes, it is crucial to recognize why superheroes are attractive in the first location. Why do humans, old and young, enjoy looking superhero films and reading comics? There are several studies and studies papers regarding why superheroes are appealing to every age. One such source is a e book via Robin S. Roseburg. In a segment of her book, Rosenberg goes into element approximately how superhero films cope with social troubles, together with justice and the idea of right vs. incorrect. human beings can become aware of with the human struggles that superheroes face. There are several elements of superhero movies, including the characters, which can be relatable. Adults who revel in watching superhero movies revel in them as it reminds them in their early life, in which they may be commonly added to super64 Scripta Fall 2022 heroes for the first time. Superheroes provide an experience of consolation and as adults, human beings can view them from a new attitude, even though superheroes have unique capabilities, we are able to still relate to them and their social troubles, people are secure with watching superhero movies as the storyline is each familiar and galvanizing, accurate prevails over evil. Superheroes comply with the everyday superhero arc that is the usual sample that a hero tale follows. as an example, the hero's backstory, the hero's discovery of themselves, the demanding situations, and the win. This predictability gives warranty that viewers recognise how the story will in the end stop and acts as a supply of consolation for visitors. Yvonne Skipper wrote an editorial wherein she describes how superheroes help people apprehend the arena. Her article affirms the findings of Rosenburg. Skipper explains how handling real issues can be hard but "...exploring this via the remedy of fictional mutant characters may make it less complicated for us to have an open communication about it". Talia clever keeps this teach of idea of the two preceding authors, clever discusses what number of superhero films have deeper meaning and political topics in the back of them. through the years, lifestyle and gender roles have changed and every new film consists of new themes, that is a probable explanation for how superheroes have expanded in recognition because their introduction to comics inside the early 1900s

2. Author - Moneik buzigen

Publication year- 2016

Summary- Moneik argues that a greater balanced attitude is wanted to fully understand the consequences of media on youngsters and children, one that also considers the blessings of media use. after all, children's media now not only include dangerous content material, but are also larded with academic additives, wonderful role models, and high-quality moral). studies in the cultural and popular studies domains have mentioned this, commonly having taken an exceedingly superb and constructionist angle on media. for instance, popular tradition researcher Ward (1996) argued that Disney films inform us memories about specific moral standards, which include taking obligation in existence and respecting one's parents in the Lion King. although, inside the media mental area, wherein maximum media outcomes research is performed, the query whether exposure to such movies will without a doubt result in increased morality and prosocial behaviours has been receiving a whole lot much less studies interest than the question whether violent media content results in improved aggressive behaviours. In their view, their studies discipline owes it to technological know-how and society to provide a greater balanced view of media results and, therefore, to increase research on high-quality media consequences.

3. Author - Casie morgan

Publication - 2023

Summary- On this essay the author talks about the preschool years represent a time of speedy human development, hallmarked through exploring one's surroundings through gross and first-rate motor motion, touching and tasting bodily gadgets, and inventive faux play. This exploration is developmentally suitable, but additionally offers risks. unintended damage is the leading purpose of demise for preschool-aged children, and not unusual injuries reflect exploration and danger-taking exhibited throughout play. faux play may be specifically unstable if children imitate volatile fashions like superheroes. Superhero media is extraordinarily famous among young children, main many youngsters to discover closely with superheroes. common exposure and subsequent identity with superheroes are concerning because media glorifies superheroes, boosting social getting to know consequences on youngsters and creating a situation in which youngsters may additionally attempt to demonstrate superhuman skills. accidents may also occur. The contemporary has a look at examined the relations among faux play, creativeness susceptibility, superhero identity, and children's threat-taking. contributors protected 105 children aged four-5- years-antique and their caregivers and have been randomly assigned to both a superhero- or school themed, tale-primarily based

protocol. each protocols included 3 equal formerly-demonstrated behavioural obligations (competencies take a look at, image kind, pastime Room) to evaluate chance-taking, imagination susceptibility was measured the use of a toddler behavioural assessment. Superhero variables had been measured the use of parent-file questionnaires and infant interviews.

4. Author - Gillespi I

Year of publication - 2016

<u>Summary</u> - This research showed us that both super heroes and villains are very captivating. They show us how to succeed with the troubles of the society. "A hero embodies what we believe is fine in ourselves. A hero is a well-known to aspire to in addition to a man or woman to be famous". A hero teaches children about "selfless bravery". They impact a child psychology by teaching them positive moral and the love for their people. They also teach the qualities of being a leader.

5. Author- LIN YI

Year of publication -2017

Summary - The motive of this thesis is to identify and recognize the results of financial conditions, film genre and the interaction effect of each on the film attendance. This paper will similarly discuss and look at how each style behaves beneath one-of-a-kind economic conditions. The economic situation in this paper is proxies by using the purchaser Sentiment Index (CSI), and the film overall performance is measured as weekly attendance. movie attendance has been discovered to be negatively associated with CSI. however, there may be no systematic research that tests how genre could have an effect on film attendance, the general result means that purchasers have a tendency to observe greater drama film for the duration of the time of recessions relative to all other movies. This locating of this paper would assist the film industry to make better choices on film production in method to gain better revenue and profit, even during the time of depression.

6. Author- Brian C. Johnson

Year of publication-2016

Summary - As an experimental observe, the prevailing studies is employing a pre-check/publish-take a look at layout to degree effects of watching a movie on viewers' social dominance orientation. results are decided primarily based on contributors' protest and post-test rankings of measures associated with social dominance orientation and transportation into narrative worlds. someone's social dominance orientation is associated with their help of racial or cultural hierarchies someone who ratings higher in SDO will be more likely to help such hierarchies. Transportation is associated with being substantially engaged with a fictional narrative textual content or film. those who are extraordinarily transported are more likely to be emotionally stricken by the text and are much more likely to connect with the movement, storyline, or man or woman characters than folks who aren't absorbed. Transportation has proven to be a contributing component in how fictional texts like film can shape ideals and attitudes.

7. Author - Pongsin Jareonpon, Thanatorn Suwan, Ajuda Wichakam, Phubeth Atta-Arunwong, Krisana Cheachainart, Panpare Bunyapukkna

Year of publication: 2018

<u>Summary-</u>Comics are a big part of a child life and many people also donated their books to charities it can directly impact the child's attitude and psychology. Many comic books are related to stories on nurses and firefighters teaching children the importance of these people in our society Marvel has many characters, spiderman being the main one. Spiderman is connected to New York as the ned for tall buildings arise. Similarly, captain America teaches children about patriotism and bravery.

8. Author - Elasser

Year of publication - 2017

<u>Summary</u>- This research paper summarized the mind aspects of watching films and content It says there are 12 features of thought movies, they are universes, temporalities, causality, conjunction, feedback, buildings, observer, contradictions, imaginary resolutions, company, time travel.

9. Author: Singel, Cindy

Year of publication 2019

Summary- This paper told us hoe adolescents are affected by superhero content. Research paper was a great experiment (non-violent and violent superhero content) with 17-year-olds. The results were very interesting. It showed that these violent movies effected men in creating a violent attitude. In this research paper, these findings are contextualized by looking at the prosocial and antisocial influences of media and aspects of adolescent development.

10. Author-Amber, Fikkers, Piotrowsk Valkenburg

Year of publication- 2020

Summary-

Despite the role of humour in teens' media entertainment, there are less studies that identify the humour types in such entertainment. This study tested a

coding framework of humour entertainment by analysing 107 television series (5,633 scenes) listed by 10- to 14-year-olds. Results say that there are 10 types and this can be helpful in our study on superheroes, the ten types are sexual, irreverent, coping, aggressive, slapstick, self-defeating, parody, wordplay, incongruity, absurdity. The types of humour often occur at the same time, highlighting the need to reconsider the existing theory.

11. Author - Seok Kang

Summary- This study explores how acceptance factors are related to human beliefs, attitudes, and systematic acceptance of VRS. do. A study based on 488 responses from VRS followers and non-users found that personal factors (innovation and motivation) were positive indicators of belief in acceptance. Attitude factors, including attitudes towards government aid and characteristics of the audience (e.g., i.e., relative advantage, compatibility, complexity, observability and verifiability), positively predictable adoption relationship. Two external factors directly impacted VRS: the ownership of virtual reality tools and the influence of social networks. VRS' integrated technology adoption model also predicted beliefs, attitudes, and acceptance very well.

12. Author-Hyang-Sook

Year of publication- 2019

Summary- The researchers conducted a laboratory experiment to see the accuracy of the information in health dramas. They did this by processing. We can understand that most films don't provide accurate information and the same thing happens in super hero movies also. This can lead to false beliefs in children

13. Topic- Identification of The Multimodal Structure of Humour in An Animated Superhero Film

Author- Andy Jefferson Sabur Sari, Tatan Tawami, Retno Purwani

Summary — This research has tried to determine the multimodal structure of jokes in an animated superhero movie. The researchers conducted the research by identifying possible jokes and describing how each element builds the joke. The researchers observed an animated superhero film, then tagging the funny parts, noted if the jokes were structured linearly and consecutively. There are two kinds of jokes. First one is when textual or dialogue joke and the other elements, such as sound effect. This is the kind that is built linearly and consecutively, where all elements of the joke such as the F1 + F2 + F3 structures, S1 S2 structures, disjunctors, and connectors are presented chronologically. The second kind is where different elements of the joke is represented by different elements of the film. This research shows how texts can structure humour and its effect on people

14. Topic- International Conference Proceeding based on a superhero

Author-Shatriya Indra, Praja, Persada

Summarizing-

This research paper started by analysing the poster. A poster made from a movie. Looking at the image of this poster, Gundala is in the centre and there is a building behind it. The analysis of the poster made us understand how super hero film poster influence the character of the viewers. The dark visuals in the poster are combined with the numerous people looking at Gundala, giving the poster a sense of tension. Rain and lightning are added as this kundala gains power.

15. Author- Casey H. Morgan, MA, Barbara A. Orangelo, Ph.D., David S. Schwebel, Ph.D.

<u>Summary-</u> Many children die in the United States because of psychosocial factors, including risky behaviour. One factor that may influence children's risk-taking propensity is the modelling of superhuman risk in superhero media based on immediate and lifetime exposure and engagement with superheroes.

Methodology

The methodology aims to find out the effects watching superhero films on audiences. The study is based on a thorough review of 15 research papers that related to the contribution to the understanding of the effects of superhero films. The papers were selected from reputable academic databases and sources, such as Google Scholar.

The first step in the methodology was to read all 15 research papers thoroughly. This allowed the research team to gain an understanding of the existing literature on the topic. The second step was to summarize the key findings and conclusions of each paper to get a clear idea with the current state of research on the topic.

Once the research team had thoroughly reviewed and summarized the existing literature, we used this information to gain a deeper understanding of the positive and negative impacts of superhero films on audiences. This involved synthesizing the key findings from the research papers and other relevant sources and considering how they might apply to the research question.

The methodology used in this research paper is based on secondary data. In addition to the research papers, we also took reference from other relevant sources such as articles, online forums. These sources provided additional insights into the topic and helped to enrich the understanding of the effects of superhero films.

Analysis and Findings:

During the course of our research, we found many effects of superhero films on viewers. We can categorize these findings into the positive and negative effects of watching superhero films.

Positive effects:

• Increased Representation of Women as Superheroes:

In recent years, there has been a positive shift in the representation of women as superheroes in superhero films. This has had a positive impact on women and girls, providing them with strong and powerful role models.

• Boosted Motivation and Inspiration:

Watching superhero films can provide motivation and inspiration to the audience. It can encourage viewers to strive for their goals and to believe in their own abilities.

• Improved Imagination and Creativity:

Superhero films often feature fantastical elements that can spark the imagination and creativity of the audience. This can inspire the audience to be more creative.

Escapism and Relaxation:

For many people, watching superhero films can be a form of escapism and relaxation. It allows viewers to get away from their reality and go into a world of adventure and fun.

Improved Family Bonds:

Superhero films are watched by all ages without the fear of adult content or influential language thus families can go together and watch superhero films. This can help to improve family bonds and create lasting memories.

Educational Benefits:

Superhero films can also have educational benefits, as they often feature themes and messages that can help to educate and inform the audience. For example, they may teach viewers about teamwork, perseverance, and the importance of doing what is right.

Boosted Cultural Awareness:

Superhero films often feature characters from diverse backgrounds, which can help to boost cultural awareness and promote understanding and acceptance.

Increased Emotional Connection:

Many superhero films feature emotional storylines that can help to create a connection with the audience. This emotional connection can make the film more enjoyable and memorable for viewers.

Problem-Solving

Watching superhero films can also help to improve problem-solving skills, as they often feature characters who must overcome challenges and find solutions to complex problems.

Empathy:

Superhero films can help to increase empathy in the audience, as they often feature characters who face difficult challenges and must overcome obstacles. This can help viewers to better understand and relate to others.

Negative Effects:

Decreased Attention Span:

The fast-paced nature of superhero films can lead to decreased attention spans in the audience. This can make it difficult for viewers to focus on the film and retain the information they have learned.

• Increased Aggression:

The violence and action in superhero films can increase aggression in some viewers. These films are especially problematic for kids who don't understand that their actions have consequences .

• Decreased Critical Thinking Skills:

The fantastical elements in superhero films can lead to decreased critical thinking skills in the audience. This can make it difficult for viewers to distinguish between what is real and what is not.

• Decreased Emotional Intelligence:

The intense emotions in superhero films can lead to decreased emotional intelligence in the audience. This can make it difficult for viewers to understand and regulate their own emotions.

Increased Anxiety and Stress:

The high-stakes situations in superhero films can increase anxiety and stress in the audience. This can be especially problematic for people who are already prone to anxiety or stress.

Decreased Physical Activity:

Watching superhero films can lead to decreased physical activity, as viewers spend long periods of time sitting and watching the screen. This can be especially problematic for children and young adults, who need to be physically active to maintain their health.

Increased Fear:

The intense action and danger in superhero films can increase fear in the audience.

Sexism:

Some movies displayed a great amount of sexism in their content making the male characters adopt a certain tone of misogyny.

Racism

Some research papers that we analysed also mentioned that the viewers felt racism take place in many films and this phytologically impacted young teens.

Violence:

Some studies showed that men tend to get violent behaviours wafter watching violent superhero movies.

Stunts:

There is a large number of children that die or suffer great injuries because they imitate the stunts performed by their superhero's.

Conclusion:

In conclusion, this study aimed to investigate the effects of watching superhero films on the audience. By taking reference from 15 research papers, summarizing them and thorough understanding of the impacts, the study found both positive and negative effects of these films. The positive effects included increased motivation, positive representation of women as superheroes, and a sense of empowerment for children. The negative effects included perpetuation of sexist stereotypes, competition with traditional film-going experiences, and decreased revenue for the theatre industry among others.

This research highlights the importance of understanding the impact of media on society, as well as the potential consequences of consuming such content. It is crucial for filmmakers and creators to consider the messages they are conveying through their work and the impact it may have on their audience. Furthermore, it is important for viewers to be aware of the effects of media and make informed decisions about what they choose to consume.

Overall, this research paper tells us more information on on the effects of superhero films and highlights the need for continued investigation into this field. By thoroughly examining the positive and negative effects, this study provides valuable insights for both filmmakers and consumers.

Discussion:

The discussion of this study's findings on the effects of watching superhero films provides important insights for the film industry and society as a whole. The study highlights both positive and negative impacts of these films on the audience.

With regards to the negative effects, one potential area for further investigation is finding ways to minimize these consequences. For example, it may be possible to reduce the perpetuation of sexist stereotypes by encouraging more representation of superheroes and their supporting characters. Additionally, exploring alternative methods of revenue generation for the theatre industry, such as incorporating new technologies or exploring alternative distribution channels.

In terms of the positive effects, it would be interesting to explore how superhero films are changing over time and the impact this is having on the audience. For example, this could include an examination of the representation of women as superheroes and the impact this is having on empowering young girls. Furthermore, investigating the factors that contribute to increased motivation and a sense of empowerment for children could provide valuable insights for educators and parents in future study.

The potential avenues for future research suggested by the discussion offer opportunities to expand our understanding of this field so that media continues to have a positive impact on society.

References:

- 1. https://www.scriptajournal.org/uploads/1/3/9/7/139783056/hussain the relationship between marvel female superheroes and youn g_girls-4.pdf
- 2. https://www.tandfonline.com/doi/abs/10.1080/17482798.2015.1121892
- $3. \quad https://search.proquest.com/openview/66355965fdff01ac96f299d5ccf7839c/1?pq-origsite=gscholar\&cbl=18750\&diss=ygraphical control of the property of the p$
- 4. http://www.aabl.com.au/aablConference/public/documents/pdf/2018 11 24 12 00 23 NYIBSRC-123 Full Paper.pdf
- 5. https://www.tandfonline.com/doi/abs/10.1080/17400309.2017.1411870
- $6. \quad \underline{\text{https://community.nasscom.in/communities/media-technology/ott-vs-theatre-what-ground-reality} \\$
- $7. \quad https://search.proquest.com/openview/0687f40bf7b607ca5bba72b755009751/1?pq-origsite=gscholar\&cbl=18750\&diss=yscholar&cb$
- 8. https://conference.unsoed.ac.id/index.php/colalite/COLALITE-2020/paper/view/738/0
- 9. https://www.tandfonline.com/doi/abs/10.1080/08838151.2020.1799691
- 10. https://search.proquest.com/openview/6282838aa17fcc247058c5c02ce346b3/1?pq-origsite=gscholar&cbl=18750&diss=y
- 11. https://mbaroi.in/blog/ott-vs-theatre/
- 12. https://www.momjunction.com/articles/positive-negative-impact-of-superheroes-on-children-00692531/#:~:text=Superheroes%2-0act%20as%20role%20models.and%20aggression%20in%20some%20children.
- 13. https://austinpublishinggroup.com/family-medicine/fulltext/jfm-v6-id1184.php
- 14. https://gobookmart.com/the-impact-of-superhero-movies-on-childrens-values-and-development/
- $15. \quad \underline{\text{https://www.kibin.com/essay-examples/the-positive-and-negative-effects-of-superheroes-on-the-identity-formation-of-young-children-in-america-WElWp9xE}$
- 16. https://parenting.firstcry.com/articles/effects-of-superheroes-on-children/
- 17. https://www.netflix.com/in/
- 18. <a href="https://www.primevideo.com/?ref_=dvm_pds_amz_in_as_s_gm_28_mkw_sRNz3EDtN-dc&mrntrk=pcrid_610141119783_slid__pgrid_84577172528_pgeo_9062031_x__adext__ptid_kwd-308511887188&gclid=CjwKCAiA3KefBhByEiwAi2LDHLmJn15HxsCaAoF2ZwG9-CfMdSTHNMIjRFpqsoI7mecG6PXLUv7z1BoCFJMQAvD_BwE
- 19. <a href="https://www.zee5.com/myaccount/subscription?utm_source=GoogleSearch&utm_medium=Mark_CPA&utm_campaign=Essence-ZEE5-Brand-Phrase-Performance&utm_term=zee&utm_content=Brand-Broad-Performance&gclid=CjwKCAiA3KefBhByEiwAi2LDHK_Ibrws5ZbqQduq-ap0mFNl2wQGK14Mtotre5BZHQ9lkaBr3QZA2cRoCPDQQAvD_BwE&gclsrc=aw.ds
- 20. https://www.hotstar.com/in
- 21. https://www.nhp.gov.in/psychology_pg
- 22. https://www.psychologicalscience.org/observer/reel-to-real-psychology-goes-to-the-movies
- 23. https://exploringyourmind.com/psychology-and-cinema-similarities/
- 24. https://www.scienceandmediamuseum.org.uk/objects-and-stories/child-psychology-and-cinema
- 25. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7288198/
- $26. \quad \underline{https://www.medindia.net/patients/lifestyleandwellness/effect-of-romantic-movies-on-a-childs-mental-health.htm}\\$
- 27. https://journal.unj.ac.id/unj/index.php/isllae/article/view/33116
- 28. https://www.scielo.br/j/hcsm/a/V6yD9B69hLzVhgqpkn9BxDF/abstract/?lang=en
- 29. https://academic.oup.com/jpepsy/article-abstract/46/7/779/6274901
- 30. https://www.atlantis-press.com/proceedings/icobest-hss-19/125931939
- $31. \quad \underline{https://search.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d731a7dc5a/1?pq-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d7a/1.pg-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d7a/1.pg-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d7a/1.pg-origsite=gscholar\&cbl=18750\&diss=yarch.proquest.com/openview/e9775ce195663e12707e48d7a/1.pg-origs=gscholar\&cbl=18750\&diss=yarch.produst.com/openview/e9775ce195663e12707e48d7a/1.pg-origs=gscholar\&cbl=18750\&diss=yarch.produst.com/openview/e9775ce195663e12707e48d7a/1.pg-origs=gscholar\&cbl=18750\&diss=yarch.pg-origs=gscholar\&cbl=18750\&diss=yarch.pg-origs=gscholar\&cbl=18750\&diss=yarch.pg-origs=gscholar\&cbl=18750\&diss=yarch.pg-origs=gscholar\&cbl=18750\&diss=yarch.pg-origs=gscholar\&cbl=18750\&diss=yarc$
- 32. https://atrium.lib.uoguelph.ca/xmlui/handle/10214/11565