# **Genuine Connection in Adolescents Based on Differing Circumstances**

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Despite living in an era of unprecedented digital connectivity, adolescents face a growing epidemic of loneliness and social isolation, which severely impacts their mental and physical well-being. This research investigates the recent generation's failure to foster meaningful relationships and explores the potential of authentic connection as a solution to this epidemic. By examining the effects of loneliness and isolation, including increased risks of heart disease, mental health disorders, and diminished overall well-being, the study underscores the urgency of addressing this public health crisis. Focusing on Narrative 4's "Story Exchange" program, this research evaluates the power of storytelling to build empathy and create genuine connections across economic and cultural divides. Using a mixed-methods approach, the study pairs adolescents from diverse backgrounds in structured storytelling activities to measure changes in loneliness and social support. Pre- and post-surveys, combined with qualitative narrative analysis, provide insights into the situational effectiveness of these programs based on cultural and economic circumstances. Findings from the study will be used to show how divides can be bridged, reduce loneliness, and improve quality of life. By addressing these economic and cultural barriers, this study seeks to investigate how a more empathetic and connected society can be created regardless of cultural and economic differences.

### **INTRODUCTION**

We are now more connected than ever, so why are so many young people still feeling isolated? Despite the constant buzz of digital communication, loneliness remains a pressing issue for adolescents, with major consequences for their physical and mental health. The issue of loneliness and isolation, particularly among children and adolescents, raises important questions about the role of human connection in improving quality of life. Despite the widespread availability of communication technologies, research indicates that social isolation is linked to increased risks of heart disease, stroke, mental health disorders, and diminished overall well-being, underscoring the urgent need for interventions (Our epidemic of loneliness and isolation, n.d.).

Loneliness, often defined as a subjective feeling of being socially disconnected despite the availability of social relationships (Cacioppo, 2009), differs from social isolation, which is an objective state of having few social interactions. Both loneliness and isolation are not merely uncomfortable emotions, but

a public health issue with serious implications. Research indicates that individuals experiencing loneliness face a 29 percent higher risk of heart disease, a 32 percent increased risk of stroke, and a 50 percent higher risk of developing dementia later in life (Our Epidemic of Loneliness and Isolation, n.d.). These physical health risks are compounded by emotional distress, including heightened risks of depression, anxiety, and suicidal ideation. Adolescents are particularly vulnerable, as meaningful relationships during this developmental stage are critical for establishing identity and a sense of belonging.



Figure 1: Social Isolation & Loneliness. Infographic summarizing the impact of social isolation (Tsui, M. 2020).

Despite the widespread availability of digital communication platforms, adolescent loneliness has increased. Although these platforms are designed to connect people, they often fail to provide the depth of interaction necessary to alleviate feelings of isolation. Social media can create an illusion of connection while intensifying feelings of exclusion or inadequacy (Weill Cornell Medicine, n.d.). This phenomenon underscores the need to explore what types of connections truly address loneliness and whether these connections can overcome economic and cultural divides.

There are initiatives that promote face-to-face connections and offer potential solutions to loneliness. Narrative 4's "Story Exchange" program is one of these initiatives. This program pairs participants from diverse backgrounds and encourages them to share one another's personal stories as if they were their own. The primary goal of this activity is to foster empathy by helping individuals see the world from perspectives other than their own. Through this process, participants often develop a deeper understanding of one another, forming genuine connections with someone with whom they would not normally interact (Narrative 4. n.d.).

Although programs like the Story Exchange show promise, their long-term impact needs further evaluation. Questions arise regarding whether empathy developed during these interactions can translate into behavioral change and whether these programs can be effectively scaled to reach diverse populations. Further research is required to assess the sustainability and broader applicability of these interventions in addressing loneliness.

Economic inequality may also present significant challenges to forming authentic connections. Young people from economically disadvantaged backgrounds often lack access to resources that facilitate social interaction, such as community centers, extracurricular activities, or reliable internet access. Without these opportunities, their ability to build meaningful relationships is substantially limited (Blum et al., 2022). The role of community spaces serves as an excellent example of this disparity. Adolescents from affluent families often participate in sports teams, after-school clubs, and youth organizations that provide opportunities for social interaction and skill development. In contrast, economically disadvantaged youth may face barriers such as the inability to afford participation fees or access transportation to such activities. This disparity creates a cycle of isolation, where the absence of resources inhibits connection, and the lack of connection exacerbates feelings of loneliness.

Cultural differences further complicate the formation of meaningful relationships. Adolescents from minority or immigrant communities frequently encounter environments where their cultural values, language, or traditions are neither acknowledged nor respected. This lack of recognition often leads to feelings of exclusion and isolation, making it more challenging to establish trust and build relationships with peers. Studies reveal that experiences of discrimination contribute significantly to social isolation, as individuals may withdraw from social settings to avoid rejection or judgment. This withdrawal often hinders the development of authentic connections (Priest et al., 2019). Programs like Narrative 4 address this issue by creating environments where individuals can share personal stories in their own voices, fostering mutual understanding and dismantling cultural stereotypes. However, scaling such initiatives to reach all marginalized populations remains a significant challenge.

Authentic connection is particularly effective in reducing loneliness because it fosters empathy, trust, and mutual understanding. Unlike superficial interactions, these deeper connections provide a sense of belonging and emotional security, both of which are essential for mental and physical well-being. Programs such as Narrative 4's Story Exchange demonstrate that even brief but meaningful interactions can have a profound impact on individuals' perceptions of themselves and others (Narrative 4. n.d.). Research further suggests that strong connections within families, peer groups, and communities significantly improve outcomes for young people. A study by Blum et al. (2022) found that adolescents with supportive social networks were less likely to engage in risky behaviors and more likely to succeed both academically and emotionally. These findings emphasize that fostering social connection is not only a remedy for loneliness but also a foundation for personal growth and resilience.

Although existing research highlights the importance of connection, notable gaps remain. Most studies on loneliness and social connection are concentrated in the United States, leaving questions about how these scenarios affect individuals in other cultural contexts. Cultures that prioritize the needs and goals

of the community over the needs of each individual, for example, may offer insights into combating loneliness that differ significantly from individualistic approaches that can be seen in many Western cultures. Investigating these cultural practices could provide valuable models for reducing loneliness on a global scale. In addition, limited evidence exists regarding the long-term effectiveness of programs like Narrative 4. While these initiatives demonstrate the potential to foster immediate empathy and connection, their ability to sustain these effects over time remains unclear. Longitudinal studies are necessary to evaluate whether the relationships formed through these programs persist and whether they lead to measurable improvements in well-being.

Loneliness is a complex issue that is influenced by several factors. Authentic connection represents a promising solution, as it promotes empathy and understanding that bridge divides. Programs such as Narrative 4 illustrate the potential of storytelling to foster meaningful connections across diverse backgrounds, reducing isolation and enhancing mental health. However, economic inequality and cultural differences have the potential to alter the effects of these connections. The ultimate goal is not only to determine whether authentic connection can reduce loneliness but also to determine if it has the same positive effects regardless of economic or cultural circumstances. Addressing these challenges through inclusive programs and further research can contribute to a more empathetic and connected society.

#### **METHODOLOGY**

This research uses a carefully designed process to explore ways in which structured storytelling programs can address loneliness and foster connections across people of different backgrounds. The methodology for this research is designed to examine the situational

effectiveness of programs like Narrative 4's Story Exchange using qualitative and quantitative data to capture both the subjective experiences of participants and measurable changes in their connection. The inquiry is rooted in building empathy, seeking to understand if storytelling can eliminate feelings of isolation and loneliness regardless of differing economic or cultural circumstances. To investigate this, a pre- and post-survey will be conducted (https://www.surveymonkey.com/r/W73HWBP). The collaborating organization, Narrative 4, has already developed a survey approved by the Institutional Review Board (IRB) to effectively assess loneliness and isolation. This survey was created with input from professionals who utilized validated tools, such as the 2023 U.S. Surgeon General's Advisory Scale, to measure changes in these areas. Participants, 30 from Palo Alto High School and 30 from a Narrative 4 community group in Port Elizabeth (Gqeberha), South Africa, will engage in a structured storytelling activity. The study will include a total of 60 participants. This number balances the need for a manageable group, given the time-intensive nature of the study and potential challenges in recruiting volunteers, while still being large enough to reveal meaningful trends in the data. To ensure participation, volunteers in Palo Alto will be recruited through collaboration with local high schools and social media outreach targeting students interested in social impact, if needed compensation through gift cards to a local restaurant involved in the cause can also be provided. In South Africa, Narrative 4 will get participants through representatives in Port Elizabeth, providing incentives if needed for participants. This pairing of participants from economically and culturally distinct backgrounds allows for a comprehensive analysis of the intervention's impact. Surveys will also include open-ended questions, encouraging participants to reflect on their experiences, and fostering a narrative analysis of qualitative data.

Data collection will span approximately two weeks, with participants dedicating 4-5 hours total to the study. This includes one and a half hours for initial surveys and orientation, two hours for the Story Exchange sessions facilitated via Zoom, and one hour for the follow-up survey and open-ended response. There will also be additional time spent over the week for a synchronized connection, where participants communicate via WhatsApp or Messages. The time it takes to complete this survey may vary based on access to technology, time zone differences, and language. All students from Palo Alto either have their own personal computer or a school-provided computer that will be capable of running the exercise. The Narrative 4 community center will provide access to technology for all adolescents in South Africa. The study will be broken into 3 groups, 20 participants from Palo Alto will connect with one another, 10 participants from Palo Alto will connect with 10 participants from South Africa, and 20 participants from South Africa will connect with one another. Partners for the Story Exchange will be randomly paired across cultural groups using a computerized matching system(<u>https://www.vondy.com/random-pair-generator--d6fHzqeA</u>). The storytelling process will follow Narrative 4's established protocol: 30 minutes for each partner to share their story, followed by 30 minutes for partners to retell each other's stories to the group. The Story Exchange method was chosen for its proven track record in fostering empathy and its adaptability to virtual settings. Additionally, there will be a trained Narrative 4 employee monitoring the activity ensuring the emotional well-being of the participants. The entire survey process is conducted using readily accessible technology, such as SurveyMonkey for the surveys and Google's QR code generator for sharing survey links. The sessions will be co-led by the primary researcher and a representative from Narrative 4, making sure there is a structured and inclusive environment. The sessions will be led by a representative from Narrative 4, while I will

observe the process to ensure there is a structured and inclusive environment. The use of virtual platforms ensures that geographic distance does not affect the process and makes the activity equally accessible for all participants. Narrative 4 will be doing all of the testing, surveys, and requiting of participants, and no data can be seen except for what Narrative 4 releases.

To analyze the collected data, qualitative responses will undergo thematic coding using software tools like NVivo, to identify recurring patterns or insights about the participants' perceptions of connection, empathy, and understanding. Quantitative data, derived from pre- and post-survey scores, will be statistically analyzed using paired t-tests to determine significant changes in loneliness and social support levels. The dual approach of statistical and thematic analysis allows a holistic understanding of the program's impact on participants. By focusing on cultural and economic contexts, the study aims to uncover whether and how these factors influence the effectiveness of the Story Exchange activity. The findings will not only address the immediate research question but will also contribute to the broader understanding of how structured storytelling initiatives can help solve the loneliness epidemic among adolescents. Through this methodology, the study seeks to highlight the transformative potential of human connection while identifying areas for further research and practical application.

# **RESULTS & FINDINGS**

The data collected from the pre- and post-evaluation surveys provides insights into the effects of Narrative 4's Story Exchange program on adolescent loneliness and perceived social integration. With sample groups from two distinct cultural and economic contexts—Palo Alto, California, and Port Elizabeth, South Africa—this mixed-method study sought to assess whether

structured storytelling interventions could foster genuine connections and improve emotional well-being across diverse backgrounds.

Eight Likert-scale questions in both the pre- and post-surveys measured participants' sense of social connection, belonging, and community using a range from "Strongly Disagree" to "Strongly Agree." A comparative analysis of these responses reveals a promising trend: while "Agree" responses decreased across several questions, this shift does not necessarily reflect a decline in connectedness. Instead, it may show a deepened self-awareness and more critical reflection after the intervention. For example, in Question 1, which gauged general feelings of connection to the world, there were 9 fewer "Agree" responses post-intervention. Similar drops were observed in Questions 4 and 7, suggesting that participants may have reassessed their social experiences more thoughtfully after engaging in personal storytelling.

This shift suggests that the Story Exchange may have moved participants from a surface-level perception of connection toward a more introspective understanding of what genuine connection entails. Rather than offering quick-fix emotional uplift, the intervention may have encouraged participants to confront feelings of disconnection in more honest and emotionally grounded ways. Some questions showed increases in "Disagreeing" responses, particularly those related to not feeling a sense of community or not participating socially. This pattern, while initially counterintuitive, matches research showing that as people become more aware of their emotions, they may feel more discomfort at first because they start to notice feelings of loneliness they hadn't recognized before.

A central focus of this study was on loneliness, measured through self-reported frequency

("Often or always," "Sometimes," "Hardly ever or never"). The post-survey data revealed a shift

away from the most extreme categories of loneliness, with fewer participants reporting they

"Often or always" feel lonely. Simultaneously, there was a modest increase in the "Hardly ever or never" category. These changes point toward a general improvement in perceived social support and reduced emotional isolation after the Story Exchange sessions.

When separating the two study groups, preliminary observations suggest that students from Port Elizabeth showed more pronounced changes in reported loneliness than their Palo Alto peers.

This could be because of the emotional intensity of being heard and understood across barriers of language, race, and socioeconomic status. Conversely, some Palo Alto students reported a sharper awareness of their own disconnection despite being in physically connected environments. This aligns with existing research suggesting that social and emotional loneliness are not always correlated with the number of social contacts but with the depth of those connections.

To gauge how adolescents perceive their place in the social fabric, both surveys included two visual metaphor questions using a 10-point "ladder" to represent perceived societal and school status. The average school ladder score rose by 0.54 points post-story exchange, suggesting that participants felt more valued and respected by their peers after theactivity. This change reinforces the hypothesis that structured empathy-building exercises can elevate one's sense of social belonging.

Research question: To what extent can structured storytelling programs, like Narrative 4's Story Exchange, foster genuine connection and reduce loneliness among adolescents across differing economic and cultural backgrounds?

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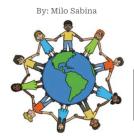
Introduction: in an age of constant digital communication, addeeds are more "connected that weel"—pt has element and is classification confine to rise. These emotional experiences aren't just incommon and any experiences and anxiety. Social media, while filled, while filled the filled that the self-indicated the self-indicated that the self

This research explores how storytelling—specifically through Narrative 4's Story Exchange program—can foster genuine relationships among adolescents from vastly different cultural and economic backgrounds. By encouraging participants to share and retell one another's personal stories, the program aims to build empathy and bridge social divides. This study asks whether such authentic connections can reduce loneliness and improve emotional well-being, even in the face of economic inequality and cultural barriers. As Ioneliness becomes an urgent public health issue, programs like Story Exchange may offer a powerful tool for building a more connected, compassionate generation.

Background & significance: Adolescent loneliness is becoming a global public health crisis. Despite widespread access to digital platforms, many young people lack the deep, meaningful connections that foster emotional well-being. Research shows that chronic loneliness increases the risk of heart disease, stroke, depression, anxiety, and even dementia later in life.

This study is significant because it explores a promising, human-centered solution: authentic onnection through storytelling. Narrative 4'S Story Exchange allows adolescents to step into acts other's lives—sharing stories across lines of race, class, and culture. by measuring how sees interactions impact delengs of loneliness and social support, this research offers insight to how empthy-building programs can create real change.

In a divided world, learning how to bridge social and cultural gaps is more important than every the search helps us understand not just how to connect, but how to connect meaningfully—no matter our differences.





sources : Social Isolation & Loneliness. Infographic summarizing the impact of social isolation (Tsui, M. 2020). "Twinkl. Com. 5g; waw.twinkl. com. sg; resourcel-t-20 637-bolding-hands-display-gicture. Accessed 27 Mar. 2025. Research and methodologies: This study investigates how storyfelling can reduce adolescent loneliness and build genuine connections across cultural and economic divides. Using Narrative 4's Story Exchange program, 60 using Narrative 4's Story Exchange program, 60 activations—from Palo Alio, California, and Port Etizabeth, South Africa—participate in a structured storytelling activity where they share and nettle each other's personal stories.

A mixed-methods approach is used

- Quantitative data: Pre- and post-surveys measure changes in loneliness and perceive
- Qualitative data: Open-ended responses are analyzed for themes of empathy, trust, and

Participants are grouped to compare outcomes between culturally similar and different peers, helping to reveal how factors like comonie status and cultural background may influence the effectiveness of these connections. The entire process is conducted virtually, making the project accessible and scalable across regions.

SOCIAL ISOLATION pai



paired t-lests to measure changes in loneliness and perceived social support. This will help determine whether participating in the Story Exchange leads to statistically significant improvements in emotional well-being.

Claimative responses north open-entees survey quessions will be examiled using internatic country with software like NVivo. This analysis will identify recurring themes such as empathy, trust, shared identity, and emotional vulnerability—offering deeper insight into how participants experience connection.

It is anticipated that participants will report decreased reelings of loneliness and increased emotional support after completing the storytelling sessions. We also expect to see that genuine connection can be formed regardless of economic or cultural background, though the depth and impact of that connection may vary depending on individual experiences.

This study aims to highlight the power of storytelling as a scalable intervention for youth mental health, offering new pathways to reduce isolation and promote cross-cultural empathy in a deeply

Interestingly, there was insufficient or inconsistent data to draw conclusive insights from the society ladder question, possibly because students understood social status differently or came from very different economic backgrounds. For adolescents in South Africa, where systemic inequality is common and deeply rooted, self-placement on a societal ladder may be influenced by historical and structural dynamics that a brief intervention cannot immediately shift.

While the sample size limited the ability to conduct robust subgroup analysis, some preliminary patterns emerged. South African students showed greater improvements in both loneliness reduction and perceived school status, potentially due to the higher emotional impact of being included in an international dialogue. Students who reported feeling "often lonely" in the pre-survey were more likely to show positive movement in post-survey ladder scores and connection statements, suggesting that the Story Exchange had the most profound effect on those starting with a higher emotional burden. Participants across both regions and genders shared open-ended feedback highlighting increased empathy and a sense of mutual respect after the intervention, even if these were not always fully reflected in the quantitative data,

The post-survey data shows that storytelling helped students better understand what real connection and disconnection feel like. Even if their scores didn't always go up, many developed a deeper emotional awareness, which can lead to lasting change. This supports the idea that meaningful connection is about depth, not just quantity. Short but honest conversations, like those in the Story Exchange, can help students build real relationships.

The results also highlight how money and culture affect connection. In places where support is limited due to poverty or discrimination, programs like Narrative 4 can help students feel seen and heard. However, it's still a challenge to make these programs widely available and ensure their impact lasts.

# **SOURCES**

#### (fixed citation errors)

Blum, R. W., Lai, J., Martinez, M., & Jessee, C. (2022, October 27). Adolescent connectedness:

Cornerstone for Health and Wellbeing. BMJ (Clinical research ed.).

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9600165/

This article argues that connectedness with family, peers, and community is crucial for adolescent health and well-being. Programs focusing on problem-solving, such as those addressing violence or substance use, tend to be ineffective. Instead, youth development initiatives should prioritize fostering strong social connections, which have been shown to reduce risky behaviors and promote mental health. Family involvement, supportive peer relationships, and community engagement are key elements. Positive youth

development programs that view adolescents as resources rather than problems are the most successful at improving adolescent outcomes.

Cacioppo, J. T., & Cacioppo, S. (2017). Social relationships and health:

The toxic effects of perceived social isolation. *Social and Personality Psychology Compass*, 11(2), e12348. https://pmc.ncbi.nlm.nih.gov/articles/PMC4021390/

This article reviews the impact of social relationships on health, focusing on how loneliness, a form of social isolation, contributes to morbidity and mortality, especially in older adults. It explores both objective (e.g., marital status, frequency of contact with others) and subjective (e.g., feelings of loneliness) isolation. The article highlights that loneliness can impair physical and mental well-being by affecting sleep, and executive functioning, and increasing sensitivity to social threats. It examines social network analysis, which measures objective relationships, and contrasts it with approaches like Heider's balance theory, which focuses on perceptions of relationships. This article is a well-researched and comprehensive review of the relationship between social isolation and health. It draws on various social theories, such as social network analysis and Fiske's relational models, and incorporates both animal and human studies, making it a robust source for understanding the health implications of loneliness. Its focus on the physiological processes influenced by loneliness, such as stress responses and immune system functioning, makes it particularly relevant to research on the impact of human connection. However, it primarily focuses on older adults, so findings might need to be supplemented with studies on younger populations for a broader perspective on loneliness across different age groups.

This article has cited authors with high expertise, affiliated with reputable institutions, and cites all of their research. This website takes a more solution-focused approach to the problem. This source also took a slightly different direction than the rest of the sources but was very helpful due to its large focus on adolescents.

Meyer, J. R., & Keck, M. (2019). Impact of social connections on health:

An overview of evidence and implications for future research. *Health Affairs*, 38(12), 1922–1930. <a href="https://pubmed.ncbi.nlm.nih.gov/31526020/">https://pubmed.ncbi.nlm.nih.gov/31526020/</a>

This study investigates the combined effects of racial discrimination and bullying victimization on the health of Australian adolescents using data from the Longitudinal Study of Australian Children (2010–2014). Findings indicate that cumulative exposure to these stressors leads to significant socio-emotional difficulties and increased risk of obesity. The study highlights the importance of examining multiple, repeated stressors to fully understand the health impacts on adolescents from stigmatized racial-ethnic backgrounds. The source is highly relevant to an AAR project, as it explores how economic and cultural barriers, such as racial discrimination and bullying, impact health and well-being, particularly among young people. The longitudinal design strengthens the reliability of its findings, but its focus on Australian adolescents may limit direct applicability to other cultural contexts. It effectively addresses a research gap by considering cumulative stressors over time rather than isolated incidents.

Miller, R. S., & Jones, M. L. (2018). Loneliness and health outcomes:

The role of social connection. BMC Public Health, 18(1), 1-9.

https://pmc.ncbi.nlm.nih.gov/articles/PMC6128338/

This study examines the perceptions of low-income minority youth regarding help-seeking behaviors and barriers to accessing mental health services at school-based health centers (SBHCs) in an urban school district. Conducted via focus groups with 76 middle and high school students, the research identifies key themes, including trust and connection as critical factors in seeking help, and barriers such as embarrassment, fear of judgment, confidentiality concerns, and lack of awareness. Teachers emerged as primary sources of mental health support, followed by peers and school mental health clinicians. Students recommended improving the comfort and visibility of SBHCs, raising awareness about mental health, and fostering connections between staff and students to increase engagement. These findings underscore the importance of addressing cultural and systemic obstacles to enhance mental health service utilization in schools.

This article is a credible and relevant source for understanding the intersection of mental health, education, and socioeconomic disparities. The study employs qualitative research methods with a robust sample size of diverse students, providing rich, detailed insights into barriers and facilitators to mental health service use. The inclusion of direct student voices strengthens the findings' authenticity and relevance to real-world contexts. However, the focus on a single urban district may limit the generalizability of the results to rural or differently resourced schools.

Narrative 4. (n.d.). Narrative 4:

Transforming the world through the power of stories. https://narrative4.com/

Narrative 4 is a global nonprofit organization that focuses on using storytelling as a tool to foster empathy, connection, and positive action. Its core program, the "Story Exchange," encourages participants to share and retell each other's stories to build understanding and break down barriers between people from different backgrounds. Through this exchange, participants develop deeper empathy, which in turn drives social change. Founded in 2012, Narrative 4 envisions a world where young people lead with compassion, replacing loneliness and isolation with connection. The organization works globally, with programs across the U.S., Ireland, Mexico, Nigeria, and South Africa aiming to be present in every school worldwide. Their mission is to provide individuals with tools for success, especially youth, to drive change in their communities by understanding others through storytelling. Narrative 4's programs have proven to increase empathy, improve student relationships, and cultivate leadership skills. In addition to its Story Exchanges, Narrative 4 supports educators and artists with resources that foster social-emotional learning, inclusion, and civic engagement. The organization's work is backed by research showing its effectiveness in building more positive school environments and beyond. The Narrative 4 website is trustworthy, with clear information about its mission and team. It could share more details about finances, but its partnerships and media coverage make it reliable. This source is beneficial to the project because it talks about a tested solution that seems to be working for many adolescents.

Shin, J., & Jeong, H. (2022). The impact of social isolation on health-related quality of life in Community-dwelling older adults: A systematic review. *BMC Geriatrics*, 22(1), 90. https://pmc.ncbi.nlm.nih.gov/articles/PMC9600165/ Blum et al. argue that youth development programs should focus on enhancing social connectedness rather than treating adolescents as problems. Connectedness, defined as a sense of being cared for and supported, is crucial to adolescent health and well-being. Research shows that strong family, peer, and community connections reduce health risks, improve mental health, and contribute to long-term positive outcomes. Family connectedness, especially the involvement and support of parents, is a strong factor in adolescent development. Positive peer relationships improve social and emotional functioning. Community cohesion, such as adult engagement and neighborhood safety, also promotes positive health behaviors. The article highlights the growing importance of digital connections but stresses that they cannot fully replace in-person relationships. Effective youth programs should foster connections within families, schools, and communities while also considering the role of digital media.

This article is highly relevant to a project on human connection and its impact on young adults. It provides robust evidence supporting the idea that connectedness—across family, peers, and community—has significant health benefits for adolescents. The source is credible and written by experts in adolescent health and youth development, including researchers from UNICEF and USAID. The article is based on peer-reviewed research and is commissioned by reputable organizations like the United Nations.

Tsui, M. (2020, September 28). *Detrimental Effects of Social Isolation on Mental and Physical Health*. Learning for a Cause.

https://www.learningforacause.com/post/detrimental-effects-of-social-isolation-on-mental-and-physical-health

The COVID-19 pandemic disrupted daily life, causing governments to impose social distancing measures that heightened feelings of loneliness and isolation. Social isolation has been shown to significantly impact mental and physical health, impairing the immune and nervous systems. For example, loneliness weakens immune responses to vaccines and alters brain function, particularly in juveniles. While face-to-face interaction offers unparalleled benefits, digital platforms like Zoom and Skype have become vital tools for maintaining meaningful connections during this period. As society adapts to these changes, the need for continued social engagement and support remains crucial to mitigate the long-term effects of isolation and loneliness.

Reliability Check: The summary references specific studies and authoritative sources, such as the American Psychological Association and the World Health Organization, which enhance its credibility. However, verifying all claims with original studies (e.g., Cigna's loneliness study or prefrontal cortex research) is necessary to ensure complete accuracy.

U.S. Department of Health and Human Services. (2023). The health consequences of social isolation and loneliness: A report from the Surgeon General.

https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf

This advisory recognizes loneliness and social isolation as a significant public health challenge, linking it to a 29% higher risk of heart disease, a 32% increased risk of stroke, and a 50% increased risk of dementia. It also highlights the economic and societal costs, such as increased healthcare expenditures and reduced workplace productivity, and

emphasizes the healing power of social connection through policies that strengthen community infrastructure, support mental health, regulate tech, and promote a culture of connection. This article is from a trusted source and cites all sources and authors. The source is very relevant to the topic. There are also no ads and no obvious grammatical errors. Overall, this will be a super helpful source due to its in-depth coverage of the subject.

Weill Cornell Medicine. (2023, March 1). America's loneliness epidemic:

What is to be done? Weill Cornell Medicine News.

https://weillcornell.org/news/america%E2%80%99s-loneliness-epidemic-what-is-to-be-done

In May 2023, U.S. Surgeon General Dr. Vivek Murthy issued a report highlighting loneliness as a major health issue, affecting half of American adults. Loneliness, unlike other forms of social isolation, is the emotional distress caused by a lack of social connections. Dr. Daniel Knopfmacher explains that moving frequently, online interactions, and social media contribute to this epidemic, worsened by the pandemic. Loneliness has serious health risks, including higher chances of premature death, heart disease, and dementia. Public health initiatives can help, and individuals are encouraged to reach out to others, use community resources, and engage in face-to-face activities. This article clearly states that the authors and sources are from reputable institutions and use well-researched, up-to-date data. Overall, this was a good source but it tended to repeat information from source #1. However, this source served as a good summary of the issue.

1. My <u>inquiry a</u>	approach(es) are: HIG	HLIGHT your choice(s)		
Historical Research	Phenomenological	Narrative Research	Quasi-Experimental Research	Needs Ass Research
Action Research	Case Study Research	Ethnographic	Descriptive	True Expe
Content Analysis	Correlational Research	Evaluation Research	Grounded Theory	
2. My Data Collecti	on Tool(s) are: HIGHLI	GHT your choice(s)		
Database	Field Notes	Interview	Document	
Focus Group	Measurement	Observation	Survey/Questionnaire	
consent obtained bef	How will you access your data: Data will be collected through interviews and surveys distributed to you consent obtained before participation. Participants will be recruited via outreach through community consocial media platforms.			
3. My Data Analys	is Technique(s) are: H	IIGHLIGHT your choice	<mark>e(s)</mark>	
Coding	Summarizing	Correlation & Regressi	on Descriptive Statistics	Inferential
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5. The materials / e	equipment that I will ne	ed: HIGHLIGHT you	r choice(s)	
Beal	kers		Computer	
Microscopes			Measuring tape	
Incubators			Camera	
Videotape			Thermometer	
Audio recordings			Other (list below):	
Data	abases			
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To determine IRB status...

7. Does your research involve human or animal subjects? In other words, are you conducting group/observation/survey/questionnaire/interview? (highlight your choice) YES NO

(if you answer NO, you are exempt from the IRB and do not need to complete the section Part III: Research

#### PART III: RESEARCH APPLICATION

Requests to conduct research within/through Palo Alto Unified School District must conform to the following format.

The review process normally takes one to two weeks. You will typically receive a response and feedback within that time frame. Please note that schools and teachers may elect not to participate in your research study, even if your proposal is approved at the school level.

#### I. RESEARCH PROJECT IDENTIFICATION

A. Title of Proposed Research Project	Testing Connection
B. Name of Primary Researcher	Michael Sabina
C. Collaborators (if applicable) 1. Teacher's name and e-mail address 2. Consultant/Expert Adviser and email address	Erin Angell     Lisa Consiglio (lisa@narative4.com)
E. Purpose of Study	The purpose of this study is to explore if a genuine connection can eliminate feelings of loneliness and isolation regardless of culture or economic differences. The research aims to use programs like Narrative 4's story exchange to see if we can promote empathy, understanding, and long-lasting bonds in youth regardless of economic and cultural differences. It has been proven that Narrative 4's story exchange approach does work to form genuine connections, but this study would dive into whether/how effective this approach is based on different economic and cultural circumstances.
D. Context for Research	Existing literature highlights a growing epidemic of loneliness, caused by a number of reasons. These feelings have been directly linked to physical health issues, as well as mental health issues. However, there is a lack of research when it comes to the difference in results based on the demographic of participants. This project seeks to explore a possible solution and the situational effectiveness of that solution.

#### II. RESEARCH GOALS

A. <u>Summary</u> Statement of Problem	There is a growing issue of loneliness and isolation, particularly among young adults (10-20), despite the abundance of communication technologies. Human connection is essential to improving quality of life, isolation and loneliness negatively impact mental health as well as physical health and limit access to opportunities for personal and social growth. But how can we foster these connections? And will the effectiveness of these strategies change based on cultural and economic differences?
B. Research questions/hypotheses or specific objectives	Can human connection help mitigate loneliness among individuals regardless of cultural and economic background? How do the effects of empathy-building programs like the Story Exchange impact the genuine connections between participants and do these effects differ based on the demographic of the participant?
C. Research Design	This study employs a mixed-methods approach, integrating both qualitative and quantitative methods to provide a comprehensive understanding of the research topic. The qualitative component involves narrative analysis of participant experiences and reflections following engagement in the Story Exchange program, with data collected through an open-ended section of the post-survey. The quantitative component uses surveys to measure loneliness and perceived social support before and after participation in the program. Data collection tools include pre- and post-surveys (utilizing established scales like the one made by the 2023 U.S. Surgeon General's Advisory). Data analysis will involve thematic coding for qualitative data and statistical comparisons, such as paired t-tests, for quantitative results. Another tool that will be used to analyze the collected data, is qualitative responses will undergo thematic coding using software tools like NVivo.

## III. DETAILED DESCRIPTION OF PROCEDURES

A. Subjects needed and sampling procedure	Participants will include high school students aged 12-20 at Palo Alto Senior High School and members of a Narrative 4 community group ages 12-20 in South Africa. I will need about 60 people total for my evaluation, 30 from Palo Alto and 30 from Port Elizabeth, South Africa. This number balances the need for a manageable group, given the time-intensive nature of the study and potential challenges in recruiting volunteers, while still being large enough to reveal meaningful trends in the data. To ensure participation, volunteers in Palo Alto will be recruited through collaboration with local high schools and social media outreach targeting students interested in social impact, if needed compensation through gift cards to a local restaurant involved in the cause can also be provided. In South Africa, Narrative 4 will get participants through representatives in Port Elizabeth, providing incentives if needed for participants.
B. Approximate dates to begin and end data	Michael Sabina will gather my study groups and start the experiment on January 20th and try to have all the data in before February 1st.

collection in/ through Palo Alto Senior High School	
C. Amount of time required of participants	Participants will dedicate approximately 3–4 hours over one week, including 1 hour for initial surveys and orientation, 2 hours for the Story Exchange, and 1 hour for follow-up surveys and interviews.
D. Instructions, instruments, or apparatus to be used (describe and attach copies)	Before the exercise begins, Michael Sabina will send a message to all participants with instructions on how to complete this survey: <a href="Survey Link">Survey Link</a> . After collecting responses, Michael Sabina will pair each participant with a designated partner and provide both parties with the necessary contact information. Participants will have the opportunity to communicate throughout the week, and at the end of the trial period, Michael Sabina with the assistance of a Narrative 4 representative, will host a Zoom call (or multiple calls for individual groups) to facilitate the Story Exchange. Once the exchange is complete, Michael Sabina will distribute a post-evaluation survey for all participants to fill out.  ( <a href="https://www.surveymonkey.com/r/W73HWBP">https://www.surveymonkey.com/r/W73HWBP</a> ). The collaborating organization, Narrative 4, has already developed a survey approved by the Institutional Review Board (IRB) to effectively assess loneliness and isolation. This survey was created with input from professionals who utilized validated tools, such as the 2023 U.S. Surgeon General's Advisory Scale, to measure changes in these areas.
E. Technology to be used (infrastructure, networking, hardware, software, etc)	The survey will be conducted using Survey Monkey, which participants can access by using a phone or laptop. They will receive a QR code, made using the Google QR maker, that will be distributed on paper or through email. The data collected can be accessed by the researcher through the use of a personal device. All students from Palo Alto either have their own personal computer or a school-provided computer that will be capable of running the exercise. The Narrative 4 community center will provide access to technology for all adolescents in South Africa.
F. Specific activities and person(s) responsible for carrying out each activity	The specific activities for this study will be carried out by designated individuals to ensure effective implementation. Michael Sabina will conduct the pre-surveys and orientation sessions, introducing participants to the research process and objectives. The Story Exchange sessions will be co-led by Lisa Consiglio and Michael Sabina, providing structured facilitation to foster meaningful storytelling and active listening. Finally, Michael Sabina will take the lead on data analysis, utilizing both qualitative and quantitative methods, with guidance and oversight from Erin Angell to ensure accuracy and reliability in the findings.

#### IV. RESULT OF RESEARCH

A. Rationale for the Study (How will the study contribute to this field of research?) This study addresses a gap in understanding how structured storytelling programs like Narrative 4's Story Exchange can impact loneliness and isolation. By focusing on diverse participants, this research contributes to the growing field of empathy-based research finding how different circumstances affect these feelings of connection. At the end of the study, there will be data displaying how economic and cultural differences affect adolescents' ability to form genuine connections with one another.

B. Benefits to the subjects	Participants in this study will benefit in several meaningful ways. They will develop enhanced empathy and active listening skills, fostering a deeper understanding of others' experiences. Additionally, they are likely to experience an increased sense of connection and a reduction in feelings of loneliness. The program will also expose participants to diverse cultural and socioeconomic perspectives, broadening their awareness and hopefully providing them with a new friend from a different place.
C. Benefits to the community	This research will provide valuable insights into how schools, community organizations, and policymakers can implement storytelling initiatives to foster inclusion and reduce social isolation. and how they can alter these activities based on different circumstances (if the connection is altered by said circumstances)
D. How will you use the information gained from the research?	The findings from this study will be used to determine if economic and cultural differences affect the formation and effectiveness of genuine connections in adolescents. With the data collected a final research paper, community presentations, and potential contributions to Narrative 4's program development will be provided.

# V. IF YOUR STUDY INVOLVES MINORS: PARENTAL PERMISSION AND/OR INFORMED CONSENT INFORMATION. SEE SAMPLES ON SCHOOLOGY

1. Attach a copy of a proposed letter to parents. The intent of this letter should be to secure informed consent from the parents for their child's participation in the research. If the study design includes a treatment group and a control group, be sure that the consent letter is appropriate for either group assignment, or write one version of the consent letter for potential treatment group students and one version for potential control group students.

#### OR

2. Attach a copy of ALL Informed Consent letters. The intent of these letters should be to secure informed consent from participants who will be researched.

# Palo Alto Unified School District Confidential Data Application Agreement Form

Research Applicant	
Research Email	
Research Title	The formation of genuine connection in adolescents based on Economic and Cultural circumstances
School Address	50 Embarcadero Rd
City/State/Zip	Palo Alto, CA 94301

I understand that any unauthorized disclosure of confidential information is illegal as provided in the Family Educational Rights and Privacy Act of 1973 (FERPA) and in the implementing federal regulations found in 34 CFR Part 99.

I understand that participation in a research study by students, parents, and school staff is strictly voluntary.

In addition, I understand that any data, datasets, or outputs that I, or any authorized representative, may generate from data collection efforts throughout the duration of the research study are confidential and the data are to be protected.

I will not distribute to any unauthorized person any data or reports that I have access to or may generate using confidential data. I also understand that students, schools, or the district may not be identified in the research report. Data with names or other identifiers (such as student numbers) will be disposed of when their use is complete.

I understand that acceptance of this request for approval of a research project in no way obligates PAUSD to participate in the research. I also understand that approval does not constitute commitment of resources or endorsement of the study or its findings by PAUSD.

If the research project is approved, I agree to abide by standards of professional conduct while working in the schools. *I understand that failure to do so could result in termination of the research study.* 

I understand that the study is not complete until this report has been provided to the PAUSD Institutional Review Board.

Signature of Researcher	MILO SABINA	Date
Signature of Supervising		
Educator		Date

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