Identical Twins' Perspective on the Formation of Their Identity

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ABSTRACT

This study aims to examine how identical twins feel about their own identity, and how they feel as an individual and in relation to their twin. With this study, the twin perspective of how twins have a separate identity and a twin identity was revealed, with the focus on the aspect of identity as it is something twins struggle with. A mixed methods study was employed to investigate this topic, analyzed with thematic analysis and a matched-pairs t test analysis. With 12 participants from the survey and 3 interviewees, it was revealed that twins do have two identities, as previous research confirms, highlighting the pros and cons of the twin relationship in general.

Literature Review

Search Strategies

Sources were located by examining the current expanse of twin studies available over various databases and research journals, pulling from sources covering the main aspects of twin identity. Many of these studies are published in known journals and many have been peer reviewed as well, ensuring credibility.

Research Gap

There is a huge research gap as to how the twins feel about their own identity, with limited studies trying to look at the twins' perspective and feelings about formulating their identities (Branje et al, 2021). This study aims to get the twin perspective on how twins have both a separate identity and a twin identity, focusing on identity specifically as it is something twins struggle with (Dean, 2015; Kozlak, 1978; Åkerman & Suurvee, 2003).

Identity

Identity has been a term that many philosophers and sociologists have struggled to define as it's a convoluted concept, but nonetheless has been integral in many social science and humanitarian topics. James Fearon, who sought out to define identity, generally categorized the aspects of identity into either a social or personal focus: "As we use it now, an 'identity' refer to either (a) a social category, defined by membership rules and (alleged) characteristic attributes or expected behaviors, or (b) socially distinguishing features that a person takes a special pride in or views as unchangeable but socially consequential (or (a) and (b) at once). In the latter sense, 'identity' is the modern formulation of dignity, pride, or honor that implicitly links these to social categories." (Fearon, 1999). Thus, identity has formed to have this double meaning that isn't just separated into two exclusive aspects – in many aspects they actually overlap. Other professionals have also attempted to define the

complex concept of identity, however, Fearon's definition of identity best suits this research topic because it includes all the facets that make-up identity, encompassing several other definitions of identity as well.

Twins' Struggle with Identity

It is common that twins struggle in the formation of their own identity, specifically identical twins. A study conducted by Jeanne B. Kozlak focuses on the social and emotional development of identical twins, providing insights on twin identity formation and their struggles. Three main areas of twin identities were explored throughout the study: developmental patterns, twin experiences, and twin separation. Results showed that twin development is affected by parental influence, twins' response, and twins' other/separate development. Parents often regarded the twins as a unit, not having a favorite twin or treating them the same. The twins' response was that they felt confused about their identity, but made sure to identify themselves as a twin, likely due to social interactions. Many of the twins in this example also outlined their shared twin experiences, such as having similar names, mirror-imaging, using plural references (using "we" instead of "I" in daily speech when it's not applicable), and experiencing several comparisons (emotional, physical, academic, and social) (Kozlak, 1978). Overall, this study validates the shared twin experiences and evaluates the effect of several factors/experiences on one's identity. However, it expands upon this idea by making comparisons as to which factors affect the twin identity the most.

These shared experiences often lead to twins adopting a 'twin identity' along with their own personal identity. Another study came to the same conclusion, which looked at the cognitive and identity developments of twins at 16 (Åkerman & Suurvee, 2003). It followed 32 twin pairs and conducted tests and questionnaires to assess self-esteem, self-confidence, social relationships, goals, anxiety, and coping methods. The findings show that twins struggle to acquire independence and a good identity since they must separate from their parents and twins, in which identical twins find it harder to develop a separate and positive identity than fraternal twins (both different and same sex twin pairs).

Summary

The complex concept of identity can be described as a social category, socially distinguishing features, or both of these combined. Twins, specifically identical twins, struggle with the formation of their own identity due to an increased amount of comparisons and twin experiences. This makes twins formulate a twin identity and a separate individual identity, which they often find difficult to separate. However, there is a huge research gap as to how the twins feel about their own identity, with limited studies trying to look at the twins' perspective and feelings about formulating their identities.

To help bridge this research gap, this research paper aims to focus on the twins' perspectives and feelings regarding formulating their own identity, to possibly generalize how most identical twins feel about forming their own identity separate and relative to their twin.

Methods

A mixed methods approach was utilized for this study, as a mixed methods approach would help produce well-rounded data to be used in the analysis. Because of the time constraints of the study, I was unsure as to how many people would participate in my interviews, which were necessary to get the true experience and opinions of twins to answer my research question. I decided to add a survey to ensure that I could collect sufficient data, even if I get no interview responses. The following methods structure was approved by the Institutional Review Board.

Structure

The specific structure of the mixed methods used in this study combines a sequential exploratory design and a concurrent triangulation design. The following table shows the differences between the two:

Table 1. Sequential Exploratory Design versus Concurrent Triangulation Design

Sequential Exploratory Design	Concurrent Triangulation Design

• Collect and analyze qualitative data first, then quantitative data
     • Qualitative data inform and shape quantitative data collection
 • Qualitative data is given priority
    (Hanson et al, 2005)
	• Quantitative and qualitative data collected concurrently, then analyzed together
	 • Quantitative and qualitative data are given equal priority
	
	 (Hanson et al, 2005)

       A sequential exploratory design was appealing as the design prioritizes qualitative data to inform and shape the quantitative data collection. This prioritization was essential to answering my research question, as my research question focuses on the perspectives and feelings of the twins, which can only truly be identified by qualitative data. However, having the qualitative and quantitative data collected concurrently in the concurrent triangulation design was very appealing as well, as it would shorten the data collection period. Both of these design methods combined allow for the benefits of each design and minimizes the weaknesses, making it tailored to the research question and its purpose. Such benefits include keeping the qualitative data and quantitative data collection process concurrent to minimize time, like a concurrent triangulation design, but still keeping an emphasis on the qualitative data over the quantitative data to effectively address my research question, like a sequential exploratory design.

       The sequential exploratory design and concurrent triangulation design were combined over two phases. The first phase involved conducting interviews in the first phase, modeling a sequential exploratory design, followed by conducting a survey and interview concurrently in the second phase, which models a concurrent triangulation design. The reason this combined design was necessary was because this research focuses on the experiences of the twins, commonly referred to throughout this paper as "common twin experiences." These common twin experiences are crucial in this study as one's experiences, the decisions they take regarding it, and how they react to it are all part of what creates and forms an individual's identity, which is what I aim to examine. Making sure that substantial data was collected on these experiences, questions on these experiences were included in both the qualitative and quantitative data collections. However, such experiences from the twins' perspectives have barely been discussed in previous research, as mentioned previously. The only sources of common twin experiences were either from my personal experiences or the limited sources that discuss twin experiences, the major source being one written over 45 years ago by Jeanne B. Kozlak in 1978 (Kozlak, 1978). It is important to note that my experiences as a twin can be heavily biased due to numerous factors such as gender, age, location, etc, making it necessary to include another source that discusses common twin experiences. However, the one source that discusses common twin experiences dates back to 1978, meaning it wouldn't cover the experiences that twins go through that relate to pop culture references or the internet (including social media). Therefore, due to the limited sources discussing common twin experiences, which are integral to the purpose of this research study, interviews were split into the two phases so that the common twin experiences discussed in the first phase interview can promote beneficial changes in the survey and make it more specific to the small population of this study (Appendix 1).

However, when the data collected process began and phase 1 was employed, I got no responses to my interviews. These interviews, that were necessary to reduce bias and to ensure I included as many common twin experiences in my survey as possible, didn't prove to be a substantial issue once I moved onto phase 2.

The survey was spread on twin-focused social media spaces, which were any social media spaces/accounts/profiles that focused on twin content, so that a diverse range of identical twins could be included in the research. It is essential to recognize that those who choose to be a part of a twin-focused social media space might be more connected to their twin identity, potentially affecting the data collected. They also might be younger, as it is more common for those who are younger to use social media; however, social media spaces were still utilized in this study as it reaches a huge audience, which includes the older population as well. The same message was sent to reach out to these accounts to share my survey (Appendix 2). There was no age limit or requirement as to who can take this survey, only that identical twins (both themselves and their twin) had to take the survey.

Originally, there were barely any respondents to the survey, so the voluntary sampling method was changed to a snowball sampling method to ensure I get responses given the time constraints of the study. Twenty flyers with a QR code to the survey were spread about my school, and more flyers were handed out to teachers to put up in their classrooms (Figure 1). I also posted the link of the survey on my social media to gain respondents, and asked my classmates to circulate the survey to any identical twins they know.

In the end, 12 respondent data was collected, specifically six pairs of identical twins aged 12-20 years old. The survey consisted of forty 'yes or no' questions, twenty four Likert scale (1-5) questions, and seven 'me vs twin' questions. The 'yes or no' questions heavily focus on the common twin experiences, asking if the twins have experienced a specific experience or not. The participants also had to rate whether they liked this experience on a scale from one to five, where one signified that they hated it while five signified that they loved it, helping me quantify their opinions to gather general data (Jensen et al, 2018). The last section of the survey has 'me versus twin' questions, where the respondent was required to answer who is more likely to do what between the two twins, which allows me to understand how their relationship dynamic might affect their identity. The survey was split up over several pages on Google Forms to make the survey easier to complete for the respondent, as this survey is very lengthy and could've deterred many people from taking it due to its length. The first part of the survey was the consent form (Appendix 3), where every respondent had to consent to take the survey, ensuring every respondent received the same message and information before taking the survey.

The interview was also spread over twin-focused social media spaces. The same demographics of the survey apply to interviews as well. This was a semi-structured interview that was conducted using premeditated questions and stems (Appendix 4). The premeditated questions and stems were based on my own experience and other sources. The participants were contacted through their contact information submitted in the survey, with the same text message and email being sent to each participant to ensure that the participant doesn't agree to an interview without knowing what it would entail (Appendix 5).

Out of the twelve respondents of the survey, three agreed to the interview (1A, 5A, 5B). The interviews lasted about 15-20 minutes each. A consent form was presented to every participant before starting the recording, to ensure the participant is comfortable with the audio recording, and is comfortable before the interview actually begins (Appendix 6). All interviews were conducted over zoom, which was decided and confirmed over text per the participants' preference, to ensure they are comfortable using the specific video calling platform.

Data Analysis

The data will be analyzed together at the final step like a concurrent triangulation design because both the survey and interviews were done at the same time due to time constraints.

The quantitative data was chosen to be analyzed using a matched pairs t-test design. This design was utilized because a matched pairs t-test design allows one to see whether the twins have a significant difference between their responses for each question. Seeing the difference between the identical twins' responses compares their responses to the standard of what would ideally be completely identical twins, which would be zero differences in the ideal twins' responses. The questions in which there are greater variations or unanimous responses can also help reveal the twins' opinions on certain experiences. The differences for each twin pairs' responses was determined for each question. Then, the six differences for each question were averaged to get the paired mean difference for each question. The questions that had one response or no responses from any of the twin pairs were not included in the calculations. From here, the standard deviation, the test statistic, and the p-value (with a 95% confidence interval) were calculated.

A

		Questions											
		A	B	C	D	E	F	G	H	I	J	K	L
Twin Pairs	1	-1	0	0	-1	-	-	0	0	-	0	-	0
	2	1	0	0	0	3	0	0	0	0	0	0	-1
	3	-1	1	0	2	0	0	0	-2	-1	0	1	1
	4	0	-1	0	1	?a	1	0	-1	0	0	-2	0
	5	1	0	1	0	-	1	-1	0	0	0	0	1
	6	2	0	0	0	0	0	0	1	0	-1	-2	0
Paired Mean Differences		0	0	0.1	0.2			-0.1	-0.3		-0.17		0.1
Standard Deviation		0.67	0.47	0.33	0.82			0.33	0.75		0.41		0.58
Test Statistic		0	0	0.47	0.77			-0.95	-1.27		-1.0		0.55
P-value *		0.5	0.5	0.32	0.23			0.18	0.12		0.36		0.30

B

		Questions											
		M	N	O	P	Q	R	S	T	U	V	W	X
Twin Pairs	1	0	0	-	-	1	0	0	2	1	-	-	-1
	2	0	0	0	-	1	0	0	0	0	-1	0	0
	3	2	2	-1	0	-1	0	-1	0	0	1	-	1
	4	-1	1	0	-	-1	0	0	-1	0	-1	-1	0
	5	0	0	1	-	-	2	-1	-	1	-	-	-1
	6	-1	-	0	-	0	0	0	-1	0	0	-	-
Paired Mean Differences		0.1					0.2	-0.2		0.2			
Standard Deviation		0.75					0.67	0.47		0.47			
Test Statistic		0.42					0.95	-1.34		1.34			
P-value *		0.34					0.18	0.11		0.11			

Figure 2. Matched Pairs T-Test Data

Note. Figure 2A shows questions A-L and figure 2B shows questions M-X. Only questions A-D, G-H, J, L-M, R-S, and U were utilized for this t-test as questions E-F, I, K, N-Q, T, and V-X contained one or more no-response answers. Such no-response answers are denoted using a dash (-).

a Question E can only be answered if the participant answers 'Yes' to the question preceding question E. However, one participant in twin pair 4 responded 'No' to the preceding question and also answered question E, making the response to question E invalid, as represented by the question mark (?).

*α = 0.05

The qualitative data was analyzed using a thematic analysis, as it will allow generalizations to be made about twins if similar themes and patterns emerge across the data (Maguire & Delahunt, 2017). An inductive thematic analysis approach, or latent content approach, was utilized for the thematic analysis as this process allows for findings with no expected outcomes. The themes derived from these interviews will be entirely based off of the interviews alone, with no other preconceived notions. No other previous studies have employed a thematic analysis regarding twin identities, meaning a deductive thematic analysis approach could not be used, as prior research doesn't exist for themes to be derived from. While general twin knowledge/conceptions and my own personal experience could've been used, bias may then have been included in the results from the qualitative data.

Through transcribing the interviews and conducting them, I was already familiar with the content of each interview. As I combed through the interviews: the following codes were originally formed: separation from twins, comparison between twins, more of an individual now, separate personality, separation from others, grouping, close relationship. Looking more at the codes and the transcript, codes were grouped together to create major codes and sub codes, with a few nuisance codes as well (Figure 3).
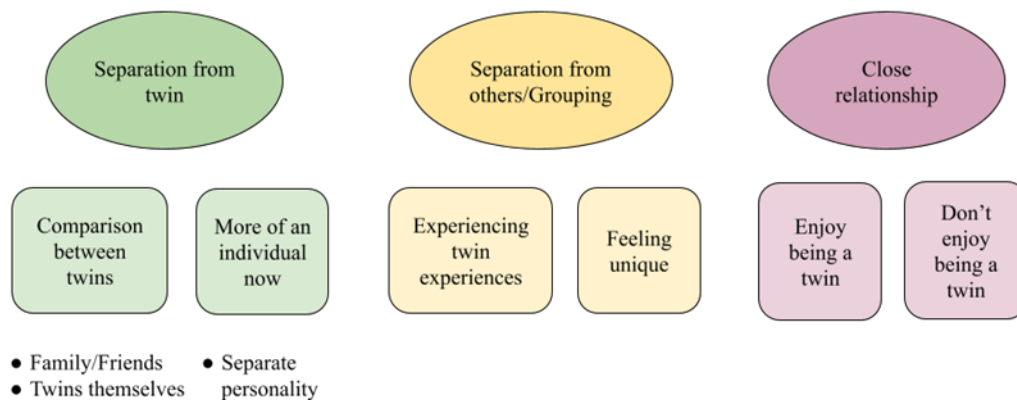

Figure 3. Map of Thematic Analysis Codes

Separation from twins' referred to the overall separation between the twins, and the factors that create them. The sub-codes under this code were 'comparison between twins' and 'more of an individual now.' 'Comparison between twins' focused on the comparisons made about twins or between them, that can create divide and separation between the twins themselves. More specifically, comparisons between twins can be comparisons made by family or friends about the twins, or can be comparisons twins make between themselves. This differentiation matters because the person who creates the comparisons plays a role in how a twin would then view themselves separately and in relation to their twin. The second sub-code under the 'separation from twin' code, is the 'more of an individual now' code. This refers to the idea that twins have become more of individuals now that they're older, compared to being more similar when they were younger. This falls under the overall idea of the separation between the twins, as many instances in the interview revealed that the twins feel like they are more separate now as they have become more individual from each other overtime. A 'separate personality' code was added underneath this code as a nuisance code, as one of the major things that fosters one to be more of an individual from another is that they have individual personalities. The 'separate personality' code aims to highlight how twins are 'more of an individual now.' Though there are other factors that can make one more of an individual, the main idea mentioned in the interviews was that the twins began to form different personalities.

The second major code group, 'Separation from others,' refers to how twins tend to be separate from those around them, for example, two twins play with each other when there are other people around them

playing with each other, secluding themselves. 'Grouping' was referred to as when the twins were grouped together as a unit or considered as the same by others. Though these codes were separate at first, 'grouping' and 'separation from others' aims to show the other side of the 'separation from twin' code. While on one hand, twins do try to separate themselves from each other, they also are seen as together by others, which both 'grouping' and 'separation from others' seem to explain. There were two sub-codes underneath this: experiencing twin experiences and feeling unique. Because one of my interview questions related to twin experiences, all interviewees responded to what twin experiences they've experienced and how that made them feel, making it a big part of the interviews. These twin experiences are only unique to twins, separating themselves from others who don't experience this, making 'experiencing twin experiences' a sub code to the 'separation from others/Grouping' code. The second sub-code is the 'feeling unique' code, which refers to twins feeling as if they're more unique than others. Because the twins have an aspect to them that is unique from others, they separate themselves from others, falling under the overall 'separation from others/Grouping code.'

The third and final major code within the methods was the 'close relationship' code. This idea of twins having a closer relationship was already hinted in previous literature, but this theme was also hinted within the interviews. Under this code, there were also two sub-codes: 'enjoy being a twin' and 'don't enjoy being a twin.' These two codes aim to highlight the duality within the complicated relationship of being a twin, as within the interviews, it was clear that some interviewees had negative or positive positions on some of the topics they were discussing, making it an important nuisance to include for the analysis. Though these sub-codes aren't mechanisms of the overall code, as it was for the other two code groups, they still explain the relationship of a twin like the overall 'close relationship' code it falls under.

Findings

Table 2. Thematic Analysis Codes and Data

Codes	Theme	Data (quote)
• Separation from twin	Twins try to separate themselves from their twin.	"... but being together in the same environment it just it wasn't the best for us" (1A). "And I think being in different kinda school/work environments has helped us get closer, not you know sharing all the friends groups, the same experiences" (1A). "trying new things, separate from what she was doing, helped me figure out what I like and meet people who are separate from her" (1A). "And like he just tries to be opposite with me" (5A). "I kind of want to have my own identity" (5B). "It's just when everyone calls us the twins and I'm also mentioned with him, I'm like, let me just be myself, too. I don't always want to be identified with him also" (5B). "I'm trying to tell everybody we're separate" (5B). "Most of the time I'll say separately, 'I'm coming', and I'll be like, 'I'm coming'" (5B).

| • Comparison be-tween twins
   ○ Fam-ily/Friends
   ○ Twins them-selves | Twins are separated through comparisons, made by family/friends or the twins them-selves. | Compared:
"5A: And we get compared.
Me: Compared?
5A: Um like, you know, if one person does better on their test like 'why can't you be like that?'" (5A).

"...you know, being compared all the time" (1A).

"and there always has to be, like, one who does this thing or this thing or who's more of this" (1A).
Family/Friends:
"And they see my brother bit more annoying, and they see me more (inaudible)" (5A).

"Me: Do you think you get that kind of comparison from your friends or just from people you don't re-ally know that sees you guys as the same?
5A: I would say like family maybe." (5A)

"... it always felt like a battle of who was liked more and there was so much comparison…" (1A).

"They tend to think she's much cooler, much more mysterious… One of us was always better or nicer or prettier, funnier. And then they always had a pref-erence, and it always bothered us" (1A).

"My friends, they kind of say like, oh, I'm a little annoying too much, I should relax a little bit and calm down… So, yeah, that's what everyone else tells me…" (5B).

"...[my family] see my brother, he's a little bit smarter, so [my family] kind of take on me for being a little bit dumb" (5B).
Twins themselves:
"Um, I feel like my brother, he's more like loud and like open. And I'm more like respectful, I guess" (5A).

"So I think he's a little bit more mature than me, a little bit smarter than me, grades wise, but yeah… I noticed the grade part because when we're compar-ing grades a couple years ago and this year, he had a little bit higher than me. I could see that a lot" (5B).

"She's really into art and, um, she's in theater, and I'm more of like a musician… I think I tend to be a bit more organized and she's a bit more laid back" (1A). |

• More of an individual now o Separate personality	The separation makes them more of an individual, with separate personalities.	<u>More of an individual now:</u> "People knew us as the twins, but recently we've been like, you know, more separate" (5A). "But like we make our own names for ourselves. We just don't go by like, oh, that's his brother, or that's his brother" (5A). "...but I think generally it's just we're like any other two people" (1A). <u>Separate personality:</u> "...we have our own personalities" (5A). "just catering to our interests and also growing individually as people and not just being the 'twins'" (1A). "I think we've always been our own people, but we're like any other two people with things in common and things that are different, that aren't necessarily binary opposites or identical" (1A).

• Separation from others/Grouping
   o Experiencing twin experiences
   o Feeling unique
	Twins also have a separation from others, in a way of being grouped together, different or unique from the average person.	<u>Grouping:</u>
		"Um, like hanging out? Yeah, we always went together. And um yes, we're always like together…Um, cuz I'm kind of known at the school as being twins with my brother" (5A).
		"People knew us as the twins…" (5A).
		"...not just being the 'twins'..." (1A).
		"...they'd kinda favor one of us as if we were kinda like, you know, different parts of one whole and they kinda had to pick one…" (1A).
		"Yeah, I feel like when people invite one of us it's like they have to invite the other, or it's like picking and choosing" (1A).
		"Because I guess that's still kind of the association between us even though we've been so separate" (1A).
		"It was always kind of me and my sister as a unit…" (1A).
		"...being dressed the same, being kind of treated as one person or, like, different halves of a whole…" (1A).
		"my parents used to dress me up all the same [as my brother]" (5B).

"The twins do this, they do that. We always got a little name always together. Instead of two people, we're always one person together." (5B).

"When we were younger, we had the same room…" (5B).

"And then, um, uh, whenever with our friends, everyone calls us the twins" (5B).

"Uh, we have two classes or a class this year together, and the teacher always gets our name mixed around because we both start with 'A' and we're kind of similar" (5B).

"Sometimes I try to plan stuff– so whenever we plan, it's always us together. But every once in a while, like whenever I try to plan something, I try to say just me, so it's in their mind like, 'Oh, it's only him.' But they always come back, 'okay, the twins are coming also'" (5B).

"Like, whenever my friend asked me what do I do with my free time, I would say, 'oh, we watch TV or something.' And they're like, 'who's we?'" (5B).

Separation from others (Includes 'experiencing twin experiences' and 'feeling unique'):

"...we switched seats to lunch. That was pretty fun" (5A).

"...we shared a room. You know, it was pretty fun" (5A).

"Me: Which twin experiences do you like the most? And which ones do you hate?
5A: Maybe like when you go to a function or something? It's always people like, oh, which one is which?" (5A).

"Me: Like, which twin experiences make you feel most like a twin?
5A: Like I said, which one is which? And, um, people ask you questions like, do you have twin telepathy" (5A).

"Okay. I wasn't really that close to my brother growing up. It was always kind of me and my sister as a unit because it was really easy to relate to her being the same age and the same gender" (1A).

"Sometimes I'll look up or I'll hear how rare monozygotic twins are, and I'm like, I'm so cool. I'm so unique" (1A).

		"I think switching places is definitely the biggest expression of our twinship" (1A).
		"Everybody was like, 'Oh my God, he's a twin. That's so cool,' so I was like, oh, that's a cool perk I have" (5B).
		"...it was super cool that we went to school, everyone's like, 'Oh my God, you guys wear the same dresses'" (5B).
		"Even like our teachers, our teachers always get mixed around, so some days back in elementary, uh, we used to switch classes, sort of" (5B).
		"... and I took his math test for him. That's things that normal people really can't do because they're not identical" (5B).
		"But then over time, I mean like 'dude you know how crazy that is.' We basically the same exact personality and stuff like that" (5B).

• Close relationship
  ○ Enjoy being twin
  ○ Don't enjoy being a twin
	Twins have a strong relationship, mainly enjoying being a twin.	Close Relationship:
		"We work good, um, we're like super close. We talk to each other like for almost everything" (5A).
		
		"So like, me and him are pretty close" (5B).
		
		"Me: So, uh, can it be compared to how other siblings are? Like, do you have a stronger bond or is it just the same as any close siblings?
		5A: I would think it's stronger because if you have another sibling, they're going to be older or younger. We're like the same" (5A).
		
		"Me: So do you think that this is just like a stronger bond than just, um, like regular siblings that were close or it's pretty much the same?
		5B: It's pretty much, yeah, I think so. Yeah. Because siblings have older, younger, so you can't really relate to them. But since he's my age, we kind of go on the same stuff at the same time, so we're kind of there as a lending hand" (5B).
		
		"So she's my best friend and we hang out all the time, we tell each other everything" (1A).
		
		"Okay. I wasn't really that close to my brother growing up. It was always kind of me and my sister as a unit because it was really easy to relate to her being the same age and the same gender" (1A).

"but now I'm still a bit closer with her because I think I can relate to her a bit more" (1A).

<u>Enjoy being a twin:</u>

"Good is like we're in the same age group and we could, um, talk about the same things" (5A).

"Honestly? I really love it. We switch places… And I think it's such a great experience. I wouldn't trade it for anything, like, built in best friends…But overall, I think, wonderful. I wouldn't trade it for the world." (1A).

"So it's like we kind of work together, which is kind of perfect, that's what I like about having him" (5B).

"That's things that normal people really can't do because they're not identical. Since we could do that, it was kind of fun" (5B).

"I used to really like it when we used to dress up the same…" (5B).

"So that's pretty fun thing to do, so it's always fun to mess around with the teachers with our names and stuff. So that's the thing I really like to do. That's something which is really nice" (5B).

<u>Don't enjoy being a twin:</u>

"Bad things are like, you know, he's with you all day, he could be annoying and stuff like that. And we get compared" (5A).

"It has been difficult, I think, plus the formation of our identities when we were in the same space" (1A).

"I don't really like being called 'the twins.' I don't, uh, know. I kind of want to have my own identity, but I don't want to sound, like, mean about it either. It's just when everyone calls us the twins and I'm also mentioned with him, I'm like, let me just be myself, too; I don't always want to be identified with him also" (5B).

Focusing on the qualitative data methods that utilized a thematic analysis, three main themes were found, each with two sub-themes. The first theme revealed was that twins try to separate themselves from their twin. Interviewee 5B highlights, on several accounts, how they want to separate themselves from their twin: "I kind of want to have my own identity… let me just be myself too. I don't always want to be identified with him also." Another interview with 5B's twin, 5A, mentions how "[5B] just tries to be opposite with me." Other non-deliberate actions and experiences that happen over the course of life can also cause a separation between the twins. Participant 1A attends a different school than their twin, to which she explains that "being in different

kind of school/work environments has helped us get closer, not, you know, sharing all the friends groups, the same experiences.

These separations between the twins, that fosters a new identity for oneself, are often conveyed through comparisons, either made by the twins' friends/family or made between the twins themselves. The results from the survey affirm this idea, with 10/12 twins feeling that they were emotionally compared, 12/12 were physically compared, 12/12 were academically compared, and 11/12 were socially compared. An interview with 5B highlights that "[my family] sees my brother, he's a little bit smarter, so they kind of take on me for being a little bit dumb.". 5B's twin, 5A, also recognizes that "[they] get compared" and that the comparisons mainly stem from "I would say like family maybe." 1A highlights the comparisons within friend groups, reporting that "it always felt like a battle of who was liked more and there was so much comparison," and that "one of us was always better or nicer or prettier, funnier. And then they always had a preference, and it always bothered us."

However, these comparisons aren't always by others, it can also be comparisons the twins recognize between themselves, further separating themselves from each other. 5B reports that he and his twin would compare things between themselves, such as grades: "...we're comparing grades a couple years ago and this year, he has a little bit higher than me. I could see that a lot." Even participant 1A compared herself to her twin when describing to me what her twin was like Questions in the survey that asked the twins to address the differences between them and their twin revealed that they do compare themselves in the aspects asked.

Another sub-theme under the theme of twin separation is that the separation makes them more of an individual, with separate personalities. 12/12 twins responded that they do feel like an individual apart from their twin. In many of the interviews, it was highlighted how the twins were quite the same, but still very different. 5A highlights how "we make our own names for ourselves. We just don't go by like, 'oh, that's his brother', or 'that's his brother'. We stay together, [but] we have our own personalities." 1A confirms this by saying, "I think we've always been our own people, but we're like any other two people with things in common and things that are different, that aren't necessarily binary opposites or identical."

The interviews revealed another major theme that twins are often grouped together, fostering a separation of them from others. The survey provides data as to how the twins get grouped together: 6/12 twins felt that they were identical or "carbon copies of each other," 12/12 twins felt that their parents treated them and their twin as the same, 11/12 twins felt said they played with their twin more than they did with others, and 12/12 twins responded that they were called "the twins" by family and/or friends. Participant 1A also reflects on how she and her twin were grouped together, separating from people like her brother: "It was always kind of me and my sister as a unit because it was really easy to relate to her being the same age and the same gender. And my brother was just kind of off in his own unit." The feelings of uniqueness that twins hold and the common twin experiences they go through often help foster this shared twin identity together separate from others. 5B and 5A, as kids, switched spots and took a math test for the other person, to which participant 5B reflects, "[those are] things that normal people really can't do because they're not identical." 5A adds on to the experiences that his twin, 5B, brought up, saying that "we switched seats to lunch" and "we shared a room," which are all things that non-twins can't experience. The survey questions that discuss twin experiences also show that the twins do experience these unique twin experiences.

The final major theme identified in the interviews was that the twins have a strong, close relationship. When asked to explain the dynamic between themselves and their twin, all three interviewees said that they were close with their twin: (5B) "So like, me and him are pretty close", (5A) "We work good, um, we're like super close", (1A) "I think we've gotten a lot closer… So she's my best friend and we hang out all the time, we tell each other everything." They also make it very apparent that they enjoy being a twin. 5B explains, "So it's like we kind of work together, which is kind of perfect, that's what I like about having him" and "So that's pretty fun thing to do, so it's always fun to mess around with the teachers with our names and stuff. So that's the thing I really like to do." 1A also says: " I really love it… And I think it's such a great experience. I wouldn't trade it for anything, like, built in best friend." 12/12 twins responded in the survey that they feel closest to their twin

and have confided in each other. However, it has been expressed that twins sometimes don't enjoy being a twin: "Bad things are like, you know, he's with you all day, he could be annoying… And we get compared" (5A), "I don't really like being called the twins" (5B), and "It has been difficult, I think, plus the formation of our identities when we were in the same space" (1A). Though there are cons, it was mainly expressed throughout the interviews that twins overall enjoy being a twin. This is confirmed in the survey where all 12, but one, respondent said that being a twin is a good experience.

Discussion

The findings align with the previous literature, as twins do struggle to create their own identity, and they reported several twin experiences that were identified in a previous study (Kozlak, 1978). Because twins are grouped together, they foster their own twin identity, which also affirms the same findings previously in the field (Bacon, 2005; Talaifar & Swann, 2018; McAdams et al, 2021). This study addresses the positives and negatives of being a twin and highlights how twins become more of an individual over time with separate personalities; although this may seem obvious, these aspects of the twin relationship weren't brought up in previous research.

Limitations

This study included a variety of limitations. The time constraints of this study pushed me to end phase 1 before I got any responses, as I had limited time to conduct both phase 1 and 2. Another major limitation was bias. First, my survey had sampling bias as the original voluntary sampling method was changed to snowball sampling due to the limited responses I was getting. It is important to note that regardless of what sampling method I employed, both methods inherently include bias. Another way I had bias in my methods was regarding the common twin experiences, as I wasn't able to get responses from phase 1, ultimately leaving all the common twin experiences based off of my own experience. Though this didn't prove to be major in my study, as the twins brought up the same experiences within their interviews and confirmed the common twin experiences I referred to in my survey, it is still biased as these are mainly from my own experiences. Another limitation is that I got a small sample size with only twelve responses from those aged from 12-20 years old. This means that this data cannot be generalized to a wider population of twins as the age range and population size are small.

Future Research

Though these findings do reveal new facets of the twin identity, further research needs to be done with a wider population to ensure that these findings can be generalized to most identical twins. Future research could also compare the nuisance between identical twins and fraternal twins, as I was not able to cover this nuisance due to the time constraint. Further research needs to examine the common twin experiences, as no other previous sources refer to them. Another nuisance future researchers can address is the effects of friends and family on the twins' identities, as it is valuable to consider the effect of others on twin identity. However, this nuisance should just be examined in relation to twin identity, keeping the focus specifically on the twins as there is a research gap on that specific area. Future research can also focus on the common twin experiences referenced in this study as they are so omnipresent in a twin's life that more research needs to be conducted about it. I also recommend that future research regarding twin identity be specifically conducted by a twin researcher themselves. Personally, I can attest that being a twin researcher performing this study was definitely an asset to me. I also recommend that future researchers try this unique methodological approach again, as I believe that it

wasn't successful only because of the time constraints. I would like to see how successful it would be without the time constraints and limited participants.

Significance

This study is particularly significant, first, from a methodological standpoint as no previous research in the specific research field combined a sequential exploratory design and concurrent triangulation design that this study employed. It can't be determined whether this methodological approach was successful or had just failed due to the limitations of the study, making this approach interesting to test whether it can be used as an effective methodological approach for twin identity studies in the future.

Second, this study adds to the gap where very limited studies discuss twins' perspectives and feelings about their identity formation (Branje, 2021). This study also focuses on the twins' perspectives on their two identities, a distinction never made apparent in relation to understanding their identity. Identical twins are important to research not only as test subject of studies focusing on the nature and nurture debate (that examines whether individual differences are caused by nature or nurture) but also as individuals that have a unique combination of a personal and shared twin identity, something most people in the world can't relate to as a non-multiple.

Acknowledgments

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