

How do People Interact with the Environment,  
Particularly the Crosswalk, Upon Approaching it?  
And Can this Interaction be a Demonstration  
of the Trait “Curiosity”?

June 10, 2025

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## Topic Choice

When I was in sixth grade, one afternoon after school, I stood at the crossroads waiting for my parents to pick me up. It was 2018, the year short video platforms had just begun to emerge. Douyin—the Chinese version of TikTok and the original version—had been on the market for less than two years, and TikTok hadn’t even launched yet. The idea of “fragmented time” hadn’t become mainstream, and people were only beginning to develop strong attachments to their phones. At the time, I didn’t have a phone of my own, so I simply stood there, silently watching people come and go.

As I observed, I noticed how many people stared down at their phones, rarely looking up or engaging with their surroundings. They seemed disconnected, even while waiting for the traffic light, stopping from moving forward. I began to wonder if people had started to lose their curiosity about the world around them—if, in those brief pauses in daily life, they no longer felt the urge to look around or take in their environment. Later, I shared my thoughts with my father, telling him, “The curiosity about the world for people nowadays is declining because they don’t look around when they are standing at a crossroads.” He said my conclusion is overly simplistic. He said that whether someone looks around or not doesn’t prove anything; it can simply be a personal habit. I shouldn’t assume I had uncovered some deeper truth based on twenty minutes of people-watching.

As a college student studying cognitive science and psychology, I find myself returning to the idea I had as a child when I saw this project topic. In this class and under the topic of this section, I began to wonder: was it simply a bold, naive conclusion from a child, or is there truly a connection between curiosity and the way people interact with their environment? Using that early observation as a starting point, we developed our research process around one key question: how people interact with a crosswalk once they approach it, and specifically focusing on the type of interaction they have with the surroundings and the correlation it has with curiosity.



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## Observation Design

The observation will take place at a crosswalk near the UCSD campus and will involve both behavioral observation and a brief one-question survey. The primary goal of this study is to explore how individuals interact with their environment while waiting at a crosswalk, and whether these interactions may be related to their self-reported level of curiosity.

A total of 50 individuals will be observed. For each person, they will be recorded on the time and date of observation, the specific location, group size, an estimated age category, and their observed behaviors.

In addition to the observational data, approximately 30 of these individuals will be approached to answer a single survey question, whether they consider themselves curious people. This question is intended to serve as a self-assessment of curiosity and will allow for a comparative analysis between observed behavior and self-perception.

By combining direct behavioral observation with a targeted self-report measure, this design aims to examine the core research questions: How do people interact with the environment, particularly the crosswalk, upon approaching it?

The sample size of 50 observational subjects and 30 survey responses is expected to meet the minimum threshold for basic statistical analysis while allowing for meaningful pattern recognition.

On the following page is the coding scheme of the observation design.

**Person:**

# of observing subjects

**Date:**

MM-DD format

**Time:**

24:59 format

**Location:**

The name of the location

**Group: Is the focal person sitting by themselves or with others**

*[A]* alone

*[P]* pair

*[G]* group

**Age: the context categories that best describe the likely age of the focal person**

*[Children]* The person is likely under 12.

*[Adolescent]* The person is obviously young, between the ages of 12-18

*[Young]* The person is probably between the ages of 18-24

*[Adulthood]* The person is completely an adult, between the ages of 24-60

*[Elderly]* The person is an elder who might have difficulty with actions

*[Unknown]* It's hard to distinguish the age of the person

**Device: The focal person uses the phone after approaching the crosswalk**

*[No]* the person does not use their phone at all before crossing the road

*[Check]* the person checks their phone and puts it away

*[Use]* the person is using their phone all the time while waiting for the light

*[Call]* the person is using their phone for a call

**Talk: The focal person talks after approaching the crosswalk**

*[No]* the person is not talking

*[Yes]* the person is talking

**Result: If the person passes through the crosswalk safely.**

*[Safe]* The person passes through the crosswalk safely

*[Pause]* The person paused in the middle of the road to reconfirm the safety situation

*[Incident]* The person engages in an unexpected incident while crossing the crosswalk

**Question: If the person considers themselves to be someone curious.**

*[Yes]* The person considers themselves to be someone curious.

*[No]* The person does not consider themselves to be someone curious.

*[NA]* The person was not asked, or the person refused to answer the question.

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## Observation Process

During the process of observation, the observer sat at a settled spot beside the crossroads, at the intersection of Gilman Drive and Geisel Library Walk on the UCSD campus. Other intersections had been explored and had low visitor traffic, which made them not put into consideration. Each individual was observed for approximately 1-3 minutes, depending on the waiting time they spent at the pedestrian light. For the pure observation process, according to Martin and Bateson's Recording Methods, the method "Focal Sampling" has been used, which involves observing one specific individual for a fixed time. And while recording data, the continuous recording method was used. Although the recording may not be precise enough, it followed the logic of capturing the true status of the individual rather than periodically recording over time.

The easiest part of the observation was gathering information that was easily visible, such as whether the object checked their device, whether they spoke with their pair, and their group size. The hardest part might be determining their age range. While the observation team was Asian and most of the observed individuals were White, there were challenges in estimating the age across ethnicities. In such cases, age classification was largely based on appearance and clothing: individuals dressed like students were typically categorized as "young," while those with a more mature appearance were categorized as "adulthood". Since the observation site is located near a university campus, it was hypothesized that most observed individuals were likely students or young adults.

The observation process lasted approximately one and a half hours, during which several interesting behaviors of specific individuals were noted.

For Persons #8 and #9, Person #8 arrived at the crosswalk first and became an object of observation. While crossing the road, they encountered Person #9 head-on, which is someone who appeared to be an acquaintance or possibly a friend. In the middle of the crosswalk, before the pedestrian light indicated a pause, they stopped briefly to exchange a few words.

Persons #20 and #21 both arrived in pairs. Person #20 and their companion approached the crosswalk first. While waiting, they checked their phone, pressed the signal button, and patiently stood by for the light to change, even though no vehicles were present. Meanwhile, the pair associated with Person #21 arrived. After a brief glance around, they crossed the road immediately, despite the pedestrian signal still indicating a stop. After witnessing this, the pair with Person #20 followed their lead and crossed the road as well.

Person #22 was using their phone during the first half of their crossing. Upon reaching the island in the middle of the road, they paused, looked up from their phone, and assessed the traffic conditions before proceeding on the second half. After checking, they put their phone away and did not look at it again for the remainder of the crossing.

Person #16 stood out as the individual who remained on their device for the longest duration. They were the only person observed using their phone continuously and hadn't looked up throughout the whole time at the crosswalk. In addition to the eye attention they had on their phone, they wore headphones for the entire period as well.

Beyond these specific individuals, a few broader patterns emerged. Most people did not use their phones while actually crossing the road, but were likely to check them either before or after crossing. Furthermore, when no vehicles were visible, many individuals chose not to press the signal button and instead walked across the road, even if the pedestrian light signaled a stop.

The pictures proofs of the process was attached in the Appendix page.

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## Data Analysis

A brief conclusion of the data collected from the observation:

- **31** observing objects approached the crosswalks alone, **13** objects were with pairs, and **6** objects appeared in groups of more than three people.
- **38** observing objects seem to be young adults, **8** are likely to be adults, **3** young adolescents, and **1** has obvious elderly difficulties. No children had appeared at this crossroad.
- **34** observing objects did not use their device at all during the observation process when they approached the crosswalk, during their crossing process, and after they crossed. **7** observing objects checked their device before or after the process, **6** were using their device approximately all the time, and **3** were making phone calls.
- **30** observing objects didn't talk to their pairs or groups before, during, or after the crossing process, and **20** objects spoke to people around.
- **45** observing objects passed the road consistently without any stop, and **5** objects paused shortly after they approached the island in the middle of the road. No observing object had engaged in any unexpected incidents.
- For the short one-question survey, **24** observing objects answered "yes" to the question, **20** objects were not asked or chose not to answer, and **6** replied "no" to the question.

Among all the categories in the coding scheme, the category with the highest agreement was whether the observed individual crossed the road safely and without stopping. This result was expected, as unexpected incidents are low-probability events. In general, people tend to assess their surroundings before stepping onto the crosswalk, which is another characteristic observed throughout the process, and can be reflected through the "device" category, where the majority (34 out of 50) of the individuals have not looked at their devices at all during the crossing process. At this specific location chosen for observation, there are several factors that have greatly contributed to creating a safer crossing environment, such as the view of oncoming traffic is clear from both directions, vehicles can be seen from a considerable distance, and traffic speed is relatively low.

In contrast, the categories with the lowest agreement were whether the observed individuals spoke with others during the observation period, followed by whether they approached the crosswalk alone, in pairs, or groups. Although a majority of individuals (30 out of 50) did not engage in conversation during the observation, it's important to note that only 31 individuals appeared alone. This suggests that most people tend to interact with others, either with physical companions or virtually, through their devices, while at the crosswalk.

Turning to the data analysis, one particularly surprising finding is that as many as 80% of respondents considered themselves to be curious individuals. This figure is higher than expected. Since "curiosity" is typically regarded as a neutral trait, it was anticipated that responses would be more evenly split, with approximately 50% answering "yes" and 50% answering "no." Another unexpected result is that 76% of observed individuals did not check their devices at all

after approaching the crosswalk. However, whether an individual arrived alone or with peers may be an influential factor that warrants further analysis, as social context could significantly affect phone usage behavior.

Specific observation records are attached in the Appendix.

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## Conclusion

During and after the observation process, it became clear that the study design might be improved by including a category indicating whether the individual stopped before stepping onto the crosswalk. This additional variable would help better capture the individual's engagement with the crosswalk itself, free from the influence of peers or distractions from devices.

One notable limitation of the study lies in the fixed observation location. Since the site is situated on a university campus, the majority of observed individuals are likely students, which limits the diversity of the sample population. Additionally, crosswalks on campus that have high foot traffic and are equipped with pedestrian signals are relatively scarce. As all data were collected from a single location, this further restricts the variety and generalizability of the dataset.

Ultimately, based on the current data analysis, no statistically significant conclusions can be drawn about the relationship between individuals' interaction with crosswalks, their self-identified curiosity, or consistent behavioral patterns. Assuming the self-reported survey data is unbiased, the contrast between individuals' responses and their observed behaviors shows only a slight trend toward a positive correlation. However, this trend is not strong enough to support a definitive conclusion about the connection between curiosity as a personal trait and environmental interaction, specifically in the context of crosswalk behavior. This shows a conclusion that there is no correlation between "curiosity" and one's interaction with the crosswalks.

Nonetheless, insights from the observation process offer a valuable insight into how environmental and social factors shape human behavior. For instance, many people appear to disregard traffic rules when there is no immediate conflict, such as the presence of vehicles. This is evident in the high number of individuals who crossed against the pedestrian signal when the road was clear. Additionally, herd mentality seems to influence decision-making, which can be supported by the behaviors of Person #21 and #22: when others choose to cross despite the signal, individuals are more likely to follow.

Interestingly, despite the prevalence of phone dependency in modern life, the data suggest that using a device while actively crossing a street has not yet become a common behavioral norm. Most individuals either avoided using their phone altogether or used it briefly before or after crossing.

In conclusion, people's interactions with crosswalks appear to be influenced more by environmental context, particularly the presence and behavior of others, than by internal traits such as curiosity. While devices remain a significant part of modern life, they have not become a major source of distraction in this specific setting. And the trait of "curiosity" is not a motivation for behaviors in the environment, such as at the crossroads.

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In the end, after completing this observation, I've come to realize that my father may have been right about it was bold and perhaps naive to conclude that "people nowadays are losing curiosity" based on just twenty minutes of standing at a crosswalk. After spending over one and a half hours observing, I now recognize that the "data" I relied on back then was likely shaped by personal bias. Still, I wouldn't take back that claim. Without making that immature statement, I might never have been inspired to pursue the question that led to this observational study. Sometimes, it is those unpolished ideas that spark curiosity, and from that spark, science begins.



Appendix



Proofs of the Observation Process

Copy of Cogs13 Final Project Cleaned Scheme

#Person	Date	Time	Location	Group	Age	Device	Talk	Result	Question		
1	6/8/25	16:33	Gilman Dr	Alone	Young	No	No	Safe	Yes		Pair: 13
2	6/8/25	16:37	Gilman Dr	Alone	Young	No	No	Safe	Yes		Group: 6
3	6/8/25	16:39	Gilman Dr	Alone	Adolescent	No	No	Safe	Yes		
4	6/8/25	16:41	Gilman Dr	Alone	Young	No	No	Pause	Yes		Young: 38
5	6/8/25	16:44	Gilman Dr	Pair	Adolescent	No	Yes	Safe	Yes		Adolescent: 3
6	6/8/25	16:49	Gilman Dr	Alone	Young	No	No	Safe	Yes		Adulthood: 8
7	6/8/25	16:50	Gilman Dr	Pair	Young	Check	Yes	Safe	No		Elderly: 1
8	6/8/25	16:51	Gilman Dr	Alone	Young	No	Yes	Safe	Yes		
9	6/8/25	16:53	Gilman Dr	Alone	Young	No	Yes	Safe	NA		Device / No: 34
10	6/8/25	16:55	Gilman Dr	Pair	Adolescent	No	Yes	Pause	Yes		Device / Check: 7
11	6/8/25	16:57	Gilman Dr	Alone	Young	No	No	Safe	Yes		Device / Call: 3
12	6/8/25	16:59	Gilman Dr	Alone	Young	Call	No	Pause	NA		Device / Use: 6
13	6/8/25	17:00	Gilman Dr	Alone	Young	No	No	Safe	Yes		
14	6/8/25	17:02	Gilman Dr	Group	Young	Check	Yes	Safe	Yes		Talk / No: 30
15	6/8/25	17:03	Gilman Dr	Alone	Young	Use	No	Safe	No		Talk / Yes: 20
16	6/8/25	17:04	Gilman Dr	Alone	Adulthood	Check	No	Safe	NA		
17	6/8/25	17:07	Gilman Dr	Alone	Adulthood	No	No	Safe	NA		Safe: 45
18	6/8/25	17:09	Gilman Dr	Alone	Young	No	No	Safe	Yes		Pause: 5
19	6/8/25	17:11	Gilman Dr	Alone	Young	No	No	Safe	Yes		
20	6/8/25	17:13	Gilman Dr	Pair	Young	No	No	Safe	NA		Question / Yes: 24
21	6/8/25	17:14	Gilman Dr	Pair	Young	Use	Yes	Safe	NA		Question / No: 6
22	6/8/25	17:16	Gilman Dr	Alone	Young	No	No	Safe	NA		Question / NA: 20
23	6/8/25	17:18	Gilman Dr	Pair	Young	No	Yes	Safe	NA		
24	6/8/25	17:20	Gilman Dr	Group	Young	Check	Yes	Safe	No		
25	6/8/25	17:23	Gilman Dr	Alone	Young	No	No	Safe	Yes		
26	6/8/25	17:26	Gilman Dr	Alone	Adulthood	Check	No	Safe	Yes		
27	6/8/25	17:28	Gilman Dr	Alone	Adulthood	No	No	Safe	Yes		
28	6/8/25	17:39	Gilman Dr	Group	Young	No	Yes	Safe	No		
29	6/8/25	17:31	Gilman Dr	Alone	Young	No	No	Pause	Yes		
30	6/8/25	17:33	Gilman Dr	Pair	Adulthood	No	Yes	Safe	Yes		
31	6/8/25	17:36	Gilman Dr	Group	Adulthood	Call	No	Safe	NA		
32	6/8/25	17:39	Gilman Dr	Alone	Young	No	Yes	Safe	NA		
33	6/8/25	17:40	Gilman Dr	Group	Young	No	Yes	Safe	NA		
34	6/8/25	17:42	Gilman Dr	Alone	Adulthood	Use	No	Safe	No		
35	6/8/25	17:44	Gilman Dr	Alone	Young	Check	No	Safe	Yes		
36	6/8/25	17:45	Gilman Dr	Pair	Young	No	No	Safe	Yes		
37	6/8/25	17:47	Gilman Dr	Pair	Young	No	Yes	Safe	Yes		
38	6/8/25	17:50	Gilman Dr	Pair	Young	No	Yes	Pause	Yes		
39	6/8/25	17:53	Gilman Dr	Pair	Young	Use	Yes	Safe	Yes		
40	6/8/25	17:55	Gilman Dr	Alone	Young	No	No	Safe	No		
41	6/8/25	17:57	Gilman Dr	Alone	Elderly	Use	No	Safe	Yes		
42	6/8/25	18:00	Gilman Dr	Alone	Young	Use	No	Safe	NA		
43	6/8/25	18:02	Gilman Dr	Alone	Adulthood	No	No	Safe	NA		
44	6/8/25	18:04	Gilman Dr	Alone	Young	No	No	Safe	NA		
45	6/8/25	18:07	Gilman Dr	Alone	Young	Check	No	Safe	NA		
46	6/8/25	18:10	Gilman Dr	Group	Young	No	Yes	Safe	NA		
47	6/8/25	18:12	Gilman Dr	Pair	Young	No	Yes	Safe	NA		
48	6/8/25	18:13	Gilman Dr	Alone	Young	Call	Yes	Safe	NA		
49	6/8/25	18:15	Gilman Dr	Pair	Young	No	Yes	Safe	NA		
50	6/8/25	18:17	Gilman Dr	Alone	Young	No	No	Safe	NA		

Specific Data  
Result of  
Observation  
and Survey