How does Generation Z handle their financial behavior? A multimethod study of a credit union's members in Rio Grande do Sul (BR)

Abstract

This project investigates how family socialization of financial practices impacts financial behavior of Generation Z. Data comes from a credit union that operates in 23 cities in the southernmost state of Brazil (Rio Grande do Sul). A multi-method approach was used. First qualitative in-depth interviews were applied to 19 members (clients) and then a series of quantitative statistical analyses were conducted analyzing financial records of 10,484 clients. Joint analysis of the qualitative and the quantitative studies point to evidence that Generation Z has overall good financial behavior, especially saving habits and conscious use of credit. They set up big financial goals and have the apparent discipline needed to carry them out. They are truly the "digital natives" that Generational Cohort Theory would imply and they actively use their knowledge and skills as a way to financially socialize their families in this ever-evolving complex financial landscape.

Keywords: Generation Z, Financial socialization, Financial behavior, Financial well-being

Introduction

Financial well-being and its subcomponents, such as financial behaviors, personal and contextual factors, etc. have been on research spot light for some years now. A society that faces financial constraints also faces profound consequences for its overall welfare. The state of living in financial instability, in poverty, or having financial problems has a detrimental impact for single individuals, their families and society collectively (ABRANTES-BRAGA and VELUDO-DE-OLIVEIRA, 2018). Nonetheless despite the academic investment in seeking out the research agenda set through the seminal work of Brüggen et al (2017), there is still much ground to cover. Especially when it comes down to understanding the human and personal factors driving the ability to develop sound financial behavior. To develop behavior change focused interventions, such as educational programs, consumer finance researchers need to better understand how these are formed so as to help consumers change undesirable financial behaviors and develop positive ones (XIAO, 2008). A still vastly ignored stream of research is how family financial socialization comes in to play for behavior development (GUDMUNDSON and DANES, 2011). Seeing as Generation Z now represents 40% of global consumers and 20% of the workforce (Thangael, Pathank and Chandra, 2019; Dwidienawati and Gadansari, 2020) it seems a pretty interesting time to ask ourselves: "How does Generation Z handle their financial behavior?". This project is funded by Sicredi Serrana, a credit union from Rio Grande do Sul, Brazil's southernmost state. The credit union was founded on 18/11/1985 and in May 2020 employed 482 people. Its headquarters are in Carlos Barbosa city and its operational area comprises 23 cities of the Serra Gaúcha and Vale do Caí regions attending to the local population with 31 street branches and 1 specialized branch for enterprises. By May 2020, the credit union had a total of 117.555 clients (associates) and R$2.273.708.727,00 of funding including deposits, investment funds, saving accounts and others. The credit portfolio summed up to R$2.160.104.772,00.

To support the endeavor this project first provides a literature review of generational cohort theory, financial well-being, financial behavior, and socialization of financial practice. Then it uses a multi-method approach. A qualitative study of in-depth interviews using rigorous procedures suggested by Flick (2009) was applied to 19 Gen Z participants and clients of a credit union. The interviews were transcribed and content analyses was applied (Bardin, 2009). Then a series of quantitative statistical analyses were applied to 10,484 Gen Z member's financial records. Studies were cross analyzed to bring up evidence that Gen Z financial behaviors are actually quite sound. Limitations and future research are provided also.

Generational Cohort Theory and Generation Z

This research uses Generational Cohort Theory as a form of segmentation. Generations are defined as "identifiable sect of people who share common birth years, experience similar life events and grow up in comparability alike environment with equal resources, opportunities and challenges" (Thangael, Pathak and Chandra, 2019). The seminal work of Strauss and Howe (1991) divides the US population into four cohorts: the Silent Generation (born between 1925 and 1942); the Baby Boomers (born between 1943 and 1960); Generation X, otherwise known as the 13th Generation (born between 1961 and 1981); and Generation Y, otherwise known as Millennials or Generation Next (born between 1982 and 2000) (Carpenter, Moore, Doherty and Alexander, 2012). Gen Z is the generation after the Millennials, often referred as iGeneration, Post-Millennials, Gen Wii, NextGen or Net-gen (Turner, 2015; Thangael, Pathak and Chandra, 2019).

There is considerable dispute and debate about the definition of Generation Z. Recent work has placed the beginning of this generation from early 1990s to until 2000 (Thangael, Pathak and Chandra, 2019) or even up until 2010 (Turner, 2015). For this project we will follow Iorgulescu (2016) definition of Gen Z starting in 1995. The internet plays a major role for this generation. Seeing that at least a third of this generation was born in a "digitally connected world" they are also called the "digital natives", in opposition to the digital immigrants of generation Y or older cohorts (Parker and Igielnik, 2020; Tulgan, 2013; Turner, 2015; Farrell and Phungsoonthorn, 2020; Dwidienawati and Gandasari, 2020). They have always experienced a life with ubiquitous connectivity from a young age. Technological advances such as tablets, social media, smart phones, cameras, flat screen TVs have shaped the way this generation acts, communicates, thinks and interacts with other, for example, close to 60% of generation Z states that "social life starts online" (Turner, 2015). It is expected that today 40%, some 2.5 billion consumers out of all global consumers, and 20% to 22% of global workforce will be constituted by Generation Z (Thangael, Pathak and Chandra, 2019; Dwidienawati and Gandasari, 2020).

According to Turner (2015) people from generation Z experienced a strong income gap during their early lives that may have caused strong ripple effects still playing out today. Children from this generation may have seen the hardships their parents were exposed to during the 2008 financial crisis which caused massive unemployment and many other economic hardships such as recession (Iorgulescu, 2016; Dwidienawati and Gandasari, 2020). Besides that young generation z adults may be now experiencing the burden of student loan repayments and may even have witnessed their parents paying loans of this or of other types. It is hypothesized that these financial stressors may have caused harsher parenting practices and, in turn, Generation Z youth might have developed high conscious about the importance of money and might possibly have developed better saving habits or financial planning

(TDAmeritrade, 2012) as well as being more generally risk averse (Dwidienawati and Gandasari, 2020). This generation is also thought to be more pessimistic about the future compared to their Generation Y predecessors.

Though Generation Z seems to be an important segment, academia has laid very little attention to them to this day and there are many areas of research that need to be better researched and understood. This research paper aims to help fill this gap by looking at financial well-being (FWB) and financial behavior of Generation Z .

Financial Well Being

Literature review will show there isn't one uncontested definition of financial well-being (FWB) a fact that isn't so surprising considering that the topic spans research on various diverse fields, such as marketing, psychology, economics, sociology and others. One of the main disputes revolves on the matter of how concrete or how subject FWB is. For example, may we measure one's FWB simply by looking at socio-demographic objective indicators? Or must we use subjective measures that account for psychological, emotional and sociological factors that impact FWB? (BRÜGGEN et al., 2017; PONCHIO, CORDEIRO and GONÇALVES, 2018; ABRANTES-BRAGA and VELUDO-DE-OLIVEIRA, 2018).

A growing community of researchers has adopted a preponderant stance showing preference for FWB as a subjective concept. For that reason, this paper will adopt that same avenue for research. In the seminal paper by Brüggen et al. (2017) FWB is defined as "the perception of being able to sustain current and anticipated desired living standard and financial freedom". The concept clearly states FWB is first a subjective matter of perception, being sometimes referred to as Subjective financial well-being (SFWB). As a subjective concept FWB is measured through self-perception regarding one's own financial happiness and satisfaction. Bruggën *et al* (2017) FWB concept clearly has a time continuum, in this matter Ponchio, Cordeiro and Gonçalves (2018) did survey research investigating the impact of a few personal factors on perceived FWB (consumer spending self-control, personal saving orientation, materialism, financial knowledge and time perspective). FWB relates financial freedom, which is the ability to make life choices without financial constraint. According to Brüggen et al. (2017) people perceive themselves to be financially well they can indulge with things like being able to buy new clothes or going out to dinner once in a while. Brüggen et al. (2017) launched the FWB framework which is comprised of 5 components: contextual factors (economic factors, legal factors, political factors, socio-cultural factors, technological factors, and market factors), financial well-being interventions (financial education, financial counseling, financial advice, framing/nudging, structural interventions), financial behavior (breaking financially destructive behaviors and habits, stimulating financially sound behaviors, establishing critical/vulnerable life situations), personal factors (socio-demographics, skills, attitudes and motivations, traits, financial practices, life events) and consequences of financial well-being (individual and collective, organizational and societal). Being Brazil the local context of this paper, it is useful to point out Abrantes-Braga and Veludo-de-Oliveira (2018) developed and validated a subjective FWB scale for the country.

Financial Behavior

According to Gorham et al. 1998, financial behaviors (FB) are actions, reactions or performances that are conducted in a particular way with regards to money management. Converging on this definition Xiao (2008) states that FB is defined as any human behavior

that is relevant to money management. FB plays a vital role in influencing individual's FWB, with positive FB relating to positive FWB and negative FB to negative FWB (XIAO, 2008; GATHERGOOD, 2012; STRÖMBACK et al. 2017; BRÜGGEN et al., 2017; PONCHIO, CORDEIRO and GONÇALVES, 2018; ABRANTES-BRAGA and VELUDO-DE-OLIVEIRA, 2018; RIITSALU and MURAKAS, 2018; MAHDZAN et al., 2019). Good financial behavior can be defined as a set of behaviors that helps one reach its financial goals. Some examples include: cash flow management, credit management, saving, investing, planning expenses, creating emergency funds, paying bills on time, retirement planning. Good FB can also drastically diminish the impact of critical life events, such as death of relatives, divorce, employment, illness and personal bankruptcy (BRÜGGEN et al. 2017). The traits of poor FB include spending more than you earn, poor debt management, late payment of bills, consuming emergency funds and impulse buying.

Socialization of financial Practices

Brüggens *et al*. (2017) includes financial practices and how the socialization of these practices evolves in a family context in their financial well-being conceptual framework. Gudmunson & Danes (2011) developed a systematic review of over 100 studies and identified that family financial socialization is largely ignored process empirically in personal finance literature. They posit that the creation of healthy financial behavior and motivation for future financial behavior change emanates from family interaction and relationships and from purposive financial socialization.

According to Danes (1994), financial socialization is "the process of acquiring and developing values, attitudes, standards, norms, knowledge, and behaviors that contribute to the financial viability and well-being of the individual" (p. 128). Jorgensen & Savla (2010) showed that parental influence affects FB through the complete mediation of financial attitudes. In other words, parents are key to shaping a positive attitude towards financial behavior. Still according to the author parents tend to be the key influence in their children's lives, the positive or negative financial knowledge, attitudes, and behaviors young adults have about money are influenced by their parents. Gudmunson & Danes (2011) suggest a research agenda that should look at how family socialization patterns the of initiation and termination of financial behavior, and also how children deal with or perceive financial issues as they transition to adulthood, create new families, and how their normative conceptions of attitudes and activities are reinforced or are redirected to facilitate or create behavior change.

Method

This research applied a mixed method quali-quanti approach (CRESWELL, 2003) and was divided in two phases. The first phase applied in depth interviews to 19 Gen Z clients spread out through 9 different cities. All interviews were conducted in brazilian portuguese. Data collection happened from january to april 2020. The research team was comprised of 3 pairs of interviewers following strict and rigorous interview methodology (FLICK, 2009). 7 interviews happened presentially in one of the credit union's street branches in the city where the client lived. 12 interviews were conducted remotely due to COVID-19 social isolation measures adopted by local governments. All interviews were recorded and transcribed. Total recording time of 592 minutes, with average 31 minutes per interview. Content analysis procedures suggested by Bardin (2009) were followed and applied: (i) pré-analyses; (ii) exploration; (iii) treatment, inferral and interpretation.

The second phase concentrated on quantitative analyses of financial records of generation Z clients of a credit union in the south of Brazil, located in Rio Grande do Sul state. Financial records dated form july 2019. Records were anonymized. 10484 records were included in the sample with clients between 16 and 24 years of age (53,3% male). Objective financial behavior was analysed such as adoption of digital channels, types of financial products being used, income gearing, arrear on credit items, etc. Descriptive and inferential statistical techniques were applied using IBM SPSS software. Comparative analyses between interest group and complete client base (87609 clients, between 0 and 101 years, 57.9% male) were also applied.

Study 1: Gen Z Exploratory interviews

Method and sample

The interviews were applied to 19 Gen Z Youth living 9 different cities in the "Serra" region of Rio Grande do Sul State, roughly from 100km to 200km north of the capital city of Porto Alegre. Their ages ranged from 15 to 25 years old. Since two participants were under 18 years old their interviews were conducted while an adult legal responsible was present. 9 interviewees were female. All participants were clients of the local credit union. Their participation was not financially incentivized and they were selected using a convenience sample method. Interview protocol was composed of a semi-structured script with 5 blocks of open-ended questions (1. Personal background; 2. Family background; 3. Professional background; 4. Relation with financial institutions; and, 5. Financial behavior).

Content analyses of the recorded interviews were according to procedures suggested by Bardin (2009) and followed three different stages: (1) pre-analyses; (2) exploration; (3) treatment, inference and interpretation. Pre-analysis phase was conducted using an open-ended research question ("How does Generation Z handle their financial behavior?") as a guide for analyses. 14 *a priori* sub categories were created to help analyses and were separated in two main categories (Generation Z characteristics and Family Financial Socialization). Exploration phase consisted on coding document set against *a priori* categories. The final phase gave rise to 6 categories created and exposed below. Interviewees name were changed to maintain anonymity.

Learning from examples, both good and bad.

In full accordance to current literature on family socialization, all of the interviewees account that most of the financial socialization occurred by observing the implicit examples and stories of their closest kin and surrounding social connections, such as work relations (Gudmundson and Danes, 2011; Jorgensen and Savla, 2010). They learned through good examples, like that of Carolina's mother. According to the interviewee she has budget planning routine which she describes as being "highly organized". She also recalls that her mother made her save 75% of the salary from her first job and when she turned 18 they used the money from the saving account to buy her driver's license. There are various other examples of learning to save before buying something, instead of counting on loans or credit cards. Learning how to develop a more thrift oriented lifestyle is also an example of interest. Giovana told that "my parents said I shouldn't just go out and buy whatever I want, that I should save some money. Money comes quick and earning more is hard. I should really follow a good and wise path". On another remark, Ana said "when I need to buy something,

you know, with the help of my parents, they usually ask me If that is something that I really need. I feel I've become more selective".

Important lessons come from bad examples as well.

> "Pedro: If I had followed my parent's example it would have been terrible. I would be in debt. They were terrible at it. My dad seems to have become a bit better… but my mom still doesn't know how to manage money… If I had followed them, I wouldn't have my company, my apartment, nothing… INTERVIEWER: Can you give me examples of their 'bad financial habits'? Pedro: Spending more than they earned, not managing, not having a reserve fund."

It is quite noticeable how all interviewees who shared bad examples could immediately identify that that behavior was financially destructive and even suggest what would be the better option. Julia developed a preference for using a debit card and saving money before buying expensive things looking at her sister's example. "She used her credit card a lot. And she was always way over her head in debt, always asking my parents to help her out. I learned how to not be like her".

Some interviewers see their financial behaviors as natural continuation, or even evolution, of their parent's behavior. Caetano said "All my friends say I shouldn't be so cheap, so 'penny-pincher'[…] I control all the family money, mine, my dad's my mom's, my fiancée, my grandmother. I think I am more of a penny-pincher than my dad!". Gudmundons and Danes (2011) point out that cultural values and sociodemographic characteristics impact family roles and underlie financial practices. It's important to note that the sociodemographic characteristic of this regions is composed mainly of third or fourth generation Italian (mostly) and German immigrants who experienced daunting economic hardship once they arrived in Brazil. Interviewees relate the local culture of being more thriftfull and of having strong saving habits to this historical scarcity. In this regard Carolina said "Italian are penny-pinchers while Germans are stubborn… and by stubborn I mean having strong focus on one main objective money wise." Caetano also said that "If I had to choose a symbol to represent who I am with money then I would be a cheap and penny-pincher 'Gringo',". 'Gringo' is a local slang for Italian immigrants.

Bidirectional socialization and exploring the unknown

The region's culture puts work as the most meaningful way of life and that the only way to earn money is though hard, sweaty, honest labor. During the interview Catarina said "From the point I finished high school I already knew I was going to work. They influenced me a lot about that. […] Since I was little I had the vision of them working and putting their backs into it. […] And that's the financially motivated view that I have. You have to go after what you want, work and work hard." But not everything that their parents teach or hold as high value is being accepted as the best way to do things. Antônio points out that "Ever since I was born my parent taught me that in order to have money you needed to work. I don't agree to that today. My parents never taught me the correct way to save. Money has to be applied in some way so It can achieve maximum profitability. I am studying about it, how to invest, but I'm still a little afraid."

One interesting aspect to analyze here is how bidirectional family financial socialization comes to play though the exploration of the unknown. Financial products have become more complex and sometimes parents are just suspicious or afraid they won't understand. Their Gen Z kids might just give a hand in this domain, even if they have to be the family pioneers on the subject. Diego's remarks that "I try to influence my dad, you know… I think he is way

to conservative. For example, I was the first to use credit card in the whole family. Had to learn how to do it on my own. I learned from my Dad the importance of having money saved but you really need to learn how to use that money, take advantage of what it can do for you". Maria points out that "I was heavy influenced by them, especially my mom, she's so organized, everything written down. My parents really wanted me to save. But I started using credit card and investing. That's something they just didn't teach me". Carolina accounts that "My mom taught me how to save money. But today it's the daughter that's teaching her how to deal with financial products and use technological resources". Carolina said she's influencing her boyfriend, "He's a bit of a spendester but I think he's changing his habits", showing that socialization also happens through peers and not only through parent-son pathway. Another socialization pathway might occur outside the family circle. Pedro, who reported their parents had bad financial habits said he learned how to manage money in first job, while he worked in a hotel. "I started to see how the hotel managed it's finance, and I talk to other employees about. I was 18 and that was when I started to understand how money worked".

Relationship with work and pay

"I am certain I want to evolve. Today I am someone's employee, you know? In the future I could be starting my own company. […] Starting my company is something that crossed my mind every day. Maybe it's not 100% in this area I work now, but someday I want to have my company, in some industry, someday." Antônio's account of wanting to be his own boss is a simple example that illustrates Gen Z's entrepreneurial spirit. Túlio remarks "I have a friend from a neighboring town and he also works with furniture and woodwork. We're talking about opening doing something together. Like outsourcing furniture assembly. We still have to mature the idea. But we sure think about it. Even because of the pay, you know? Sure, in the beginning it's not easy, but once you start to get your name out it will be a good thing. […] It might be that it will work out or it might be that we get a lesson out of it".

But not all of Gen Z wants to follow that path. In a major sense, even for the ones who want to open their own business, interviewees said their quite satisfied with their current job and pay. Ana, who works in the family accounting business while she studies nursing, said "I'm quite satisfied with how things are right now because I can already start getting ready for the future. I earn half a minimum wage, and work half time. I've talked to a few friends who also work and in comparison, I see my pay is quite adequate". Helena said "I want to work with foreign trade. If my current company does not present an opportunity, than I'll look for specialized company next year. But I have to say that today I'm satisfied with my current professional situation and pay."

As can be seen these her remark, even though she's satisfied now, Gen Z youth does not feel that their future professional path is linked to only one company or field, a vision quite different than that of their forebearers who spent many years either working in agriculture or in the same company. Catarina accounts that "My parents work Saturday morning too. So, the time they have to do what they want, like spending time with family, is very short. I see that, even holding work as something important, this free time is really important. I see that for my personal work life I don't what that, I don't want Saturday morning's to be about work. […] And the two spent a lot time in the company. Too much time in the same place. I think I don't want that either."

Price sensitivity

Gen Z shows strong sensitivity to price. "I buy a lot things online. But I research and compare prices a lot" said Diego. Caetano tell us that "I bargain a lot… That's the 'Gringo' in me. And if I'm having a bad day, than I just don't do business". Caetano goes the extra mile and even point out that "it's cheaper to get a loan from friends or family because it doesn't come with interest rates". Giovana accounts that "The more expensive the purchase, the more I research beforehand". This price sensitivity is also a factor in terms of how they see their relationship with financial institutions. Both Antônio and Helena point out that a digital bank competitor has a no tax policy and they complained and bargain with the current banks to get rid of their own taxes.

Gen Z looking good on financial behavioral practices

It seems that family socialization of financial practices has paid off. Gen Z interviewees showed a good range of very sound financial behavior. They seem to have a very conscious posture when comes to have they use credit. Vanessa points out "Credit cards are like a loan. You need a lot of control and organization to use it wisely". Diego said "I prefer to use credit card only for online shopping. I know I have limits but I never intend to use it". Túlio in turn "I plan my credit purchases so as to not have a lot of purchases piled up, I space them out, so it doesn't eat up my earnings".

They also have good planning and budgeting skills. Ana said "My parents also influenced my financial organization. I keep on track using the app, checking the balance and records. I try to organize myself doing a few calculations sometimes." Helena as kid accompanied her father to the bank tasks for the family enterprise. She said she learned a lot from that experience "Now a days I still keep true to my father's teaching. 90% of what I spend is programmed. I have a notebook which I use to keep everything neat and tidy". The app and

Their preferred option in terms of purchasing is paying up front. Carolina jokes about it "Credit? I don't even know what that is [giggles]. I only purchase paying up front. I only buy what fits in my monthly salary". Diego preferred to save all the money to buy his first car instead of contracting credit "I don't like to owe anyone". In fact, credit is seen at times in less favorable lights as Giovana points out, she finds it "too risky".

Following their father's footsteps, they show strong saving habits. Matheus said "I divide my salary into three parts. Two parts I save or invest". Carolina remarks that "Every month I save a little bit of money. I have objectives for them, like building my house" and Caetano said "I have plans for the future and I tend to keep some money saved for these objectives". In fact, they understand that saving is more efficient when you have and objective linked to it like Otávio points out "I save so it can bring me some benefits, for a higher purpose… Not saving just to saving. I plan for it".

With big goals come trade-offs

One of Gen Z's biggest dreams in to travel. And not just inside their own state or country, but to travel the world. Planning ahead and paying in advance, of course. Jociele tell us "I start to plan myself 1 to 1 and half years in advance". Julia said "I'm travelling to Peru next year. And I'm paying in advance". Caetano describes his process which includes "expanse and costs planning, looking for accommodation and booking rides. When I have a travel planned,

I start saving money every month". And Carolina tops it off point that "I save up the money to take with me when I travel".

But there is big rival in terms of financial dreams and objective for Gen Z: homeownership. Looking back at Carolina's example "I like to travel a lot. But haven't done much of it lately because I'm saving up to build a house". Caetano said exactly the same thing as Carolina "I really like to travel. But I'm not doing that lately. I'm saving to build a house in São Marcos". Túlio said "I really wanted to travel up north, to Mato Grosso, to see the farms and cattle and rodeos up there. But I'm not really planning for that just yet because I just bought a farmstead with my dad". Antônio remarks "I have a dream to travel the whole world. It's like I don't have a specific place I want to go. But sure, I guess I would go to the Caribe. But I'm not planning financially for that yet because I have other priorities like buying a car or a house. After I conquer that then comes travelling."

Discussion

These six categories clearly reinforce some key concepts both from Generational Cohorts Theory of Generation Z and from Family socialization of financial practices. In terms of what could be expected of Generation Z's cohort attributes, according to Turner (2015) due to earlier financial stressors, Gen Z should give high importance to money and also good spending habits. Both of these claims find support in the qualitative analyses. "Learning from examples, both good and bad" shows clear clues of the capacity of this generation to understand how to spot bad financial behavior and how to suggest better ones. "Price sensitivity" also supports the same claim of importance given to money. This particular category helps to balance the seemly contradictory characteristics of Gen Z: for the one hand they should give high importance to money and to good saving habits (Turner, 2015), but on the other they should seek instant gratification and therefore be prone to making bad financial decisions based on impulse (TDAmeritrade, 2012). The content here analyzed seems to point that there is a hierarchy in play and that the importance given to money may help this youth counterbalance impulse urges based on the need of instant gratification.

The category "Gen Z looking good on financial behavioral practices" brings sounds example of not only good saving habits, but also organization, conscious use of credit and planning. These teens set high goals (travelling and building houses) that test their financial skills and practices as can be seen in the category "With big goals come trade-offs".

A huge support that family socialization comes both from explicit and (even more) from implicit practice can be seen throughout all the examples displayed in the first of the six categories. Beyond that, the category "Bidirectional socialization and exploring the unknown" sums up interesting stories that supports Gudmunson and Danes (2011) hypothesis that socialization never really stops once we reach adulthood. There is a constant need for update and resocialization. And these new practices can actually be socialized through a reverse pathway of sons and daughters teaching their parents.

One final note is the easiness that Gen Z present in regards to using at the best of their skills technology and internet in their favor. Spread transversely through many of the categories are examples of how they use the bank app to help them socialize, manage or plan not just their financial lives, but also that of their parents and extended families. They truly are "Digital natives" (Turner, 2015).

Study 2: Statistical analysis of Gen Z financial records

The second study explored some financial practices from all 10484 Gen Z secondary data collected from the credit union's financial records. This group is formed of people from 16 to 24 years old, 53.5% male.

The characterization of this Gen Z population indicates that 30.2% are students, 4% are formal partners in some business and 2% are classified by the credit union as having defaulted for more than 90 days on at least one contracted product. 73.5% carried out at least one transaction or contact with the credit union in the 30 days prior to data collection. The average declared income is R$1,475.00 being that half of the population has an income of up to R$1,200.00. Their professions are usually auxiliary services (production assistant, packer, repositor, ...).

As for the use of financial products, the solutions index per associate (SIA), and the contribution margin (CM) were analyzed. Associates are the clients of the Credit union; The index of solutions per associate (SIA) represents the number of products and services used. It is an indicator of the level of the relationship and business between the associate and the credit union (WARTHA et al, 2019). The higher the SIA, the greater the degree of relationship between the parties. The credit union tracks the contribution margin (CM) of its associates which represents the difference between the revenues and the variable costs of each associate and uses this index for management analysis.

For Gen Z, the average SIA value was 3.2, varying from 1 to 13, with a median of 3.0 and 95% of members showing SIA up to 7. The indicator suggests that the degree of relationship is higher for Gen Z than for the average credit union associate, which showed an average SIA of 2.9 and a median of 2.0.

The average value obtained for the CM indicated an average per associate equivalent to 49.7% of the average CM among all members of the credit union, with a median equivalent to 55.7% of the general median. These values are compatible with those obtained in the analysis of funding and loan values. Gen Z has average funding (amount invested in the credit union) equivalent to 27.5% of the amount applied in the general average.

A discriminant analysis was performed, where the discriminant variable was the information about of having an active account or not. The other variables were all the products used by the associates, except the basic account service tax product, as it is practically a mandatory product for everyone. A sequential procedure was used, where the variables were inserted, one by one and the importance was analyzed through the standardized canonical discriminant function coefficients. The result indicates that the product digital channels is much more important for Gen Z (coefficient = 0.695) than for the general public (coefficient = 0.484), proving the connectivity of this generation (Turner, 2015). As a consequence, it is clear that promoting the use of this resource enhances the activity of members, with a more effective result among Gen Z.

Comparing the other products, the standardized weights for the use of the debit card and salary accounts are similar, that is, they are important to maintain the activity of Gen Z, in the same proportion as the general membership. It is also noteworthy that having overdrafts and time deposits do not contribute to increasing the activity of young people in the same proportion as in general. Other products, such as automatic debt payments and social capital, are not related to the Gen Z activity.

Investments x income commitment

Among Gen Z, 5717 have values invested in the bank, which corresponds to 54.5% of the population, with an average of 4.86 times their declared income. The proportion of young people who have money invested is similar to the general group (57.6%) but the amount invested is much lower than the general average (11.98 times the average income).

When analyzing the amount they have invested in the bank as a ratio of the age of the account and their income, we create an indicator that shows Gen Z invests, on average, 12% of its income per month. For the general group of associates the value is 20%.

We consulted Brazil's Central Bank Credit Information System database for information on our Gen Z population. Data was collected for overdraft, credit cards, personal credit, credit lines for purchasing vehicles and real estate credit. Gen Z data indicates that 5105 have values committed to credit cards (48.7%) and 2163 in overdraft (20.6%), of which, 1617 are people with card and overdraft (15,4% of the base). Overall, these percentages are 43.7% for cards, 23.2% for overdraft and 16.1% for both. In comparison, it is clear that, proportionally, Gen Z uses more cards and less overdraft, compared to the general behavior. A smaller percentage of the Gen Z population (14% compared to 20% of total) use personal credit lines and they also contract a proportionately smaller amount (5,2 times of Gen Z income compared to 7,84 times of total). Gen Z commits, on average, 1.55 times the declared income on credit card and overdraft, half of which greater than 1.2 times the income. This value is lower than the average general commitment, which is 2.15 times income. As for being indebted with the credit union, the proportional number of people are not different between groups (Gen Z x general), but is higher among men in both groups. Considering that unsecured credit commitments such as credit card, overdraft and personal credit lines are more indebtedness prone and therefore risky (Gathergood, 2012; Disney, Bridges and Gathergood, 2008; Ottaviani and Vandone, 2011), we can than conclude that Gen Z is proportionately less exposed to this type of risk.

Only 142 have real estate credit lines contracted (1.35%). Among these Gen Z, the average value is practically R$ 86,000.00 and for the general public the real estate credit amount contracted average is R$ 90,000.00 (5.48%). These figures show that, proportionally to income, Gen Z invests more in real estate credit, which indicates its concern with planning for the future.

Regarding the use of a single institution or more than one, based on data from the Central Bank, it can be said that in all products, except real estate loans, Gen Z has more adoption of a single financial institution.

General Discussion

Both studies seem to corroborate with the main ideas laid out during literature review about generational cohort theory and family socialization of financial practices and how both can relate to financial habits of generation Z. The first interesting corroboration is about the “digital native” aspect of generation Z. The qualitative interviews showed how this generation is accustomed to technology and how they seamlessly navigate through the online environment using it as a way not only to financially organize themselves but also to influence and financially socialize others, specially their parents. The discrimination analysis applied during the quantitative study provides extended proof of the importance given to

online channels by Gen Z seeing as access to digital channel is a major variable that links to brand loyalty.

Another idea laid out by generational cohort theory and applied to Generation Z is about their financial habits, specially the concept that participants of this cohort should have better saving practices since they could have been exposed to more family (and personal) financial stressors. The content analysis brings numerous self-reported examples of how they learned to save either through imitation of their family's good examples or through conscious avoidance of bad ones. The statistical analysis of their deposit rates seems to confirm their reports. In accordance to Economic Life Cycle theory (Disney, Bridges and Gathergood, 2008; Ottaviani and Vandone, 2011) the credit unions records show that their Gen Z population usually has entrance jobs which afford them entrance level payment. Considering that the overall price of life has increased substantially if compared to their forebearers it would be easy to conclude that their salary shouldn't afford them much consumption power which in turn should mean they would have to use considerable amount of their wages just to fulfill basic needs. Nonetheless, it is noteworthy to point out, that considering this context, having more than 50% of Gen Z with almost 5 times their monthly wage applied in deposit accounts is certainly as example of rigorous saving habits. It is also a possible signal that these teenagers and young adults still have strong financial support coming from their families, which in turn could mean strong family ties.

Gen Z's use of overdraft and credit card provide another example that seems to indicate good financial behavior. As the statistical analysis showed this generation has a lower usage of overdraft, which is an expensive type of consumer credit (Disney, Bridges and Gathergood, 2008) and a superior usage of credit card. Nonetheless their overall proportionate income commitment is 27% lower than that of the total population (1,55 times their income versus 2,15 times). The interviews cleared showed that this Generation prefers saving up and paying upfront. Participants also reported having great conscious over how to use credit wisely, specially credit card limits. The same can be said about personal credit. A smaller percentage of the Gen Z population (14% compared to 20% of total) use this type of credit and they also contract a proportionately smaller amount (5,2 times of Gen Z income compared to 7,84 times of total).

When we look at their over-indebtedness, we can conclude that there is no big difference between them and other cohorts. On one hand we can give no evidence to say that they have better behaviors and terms of not falling into credit arrears, but we can say that they don't have worst behavior either. This specific subject is very susceptible to a local culture analysis seeing that the credit union's whole indebtedness indexes are way lower than that of the national average. The credit union informs that average over-indebtedness after 90 days of arrear is 3,17% in the market as a whole. But credit union's own over-90 hits 0,58% (data relative to March/2020). Content analyses showed that the "Gringo" lifestyle puts thrift as a meaningful way of life and simultaneously honors not being in debt with anyone.

One last remark is in terms of homeownership. Despite the fact that a lower percentage of Gen Z have contracted real estate credit lines (1,35% versus 5,48%) it is important to note two things. The first is that because of how real estate market and credit is structured in Brazil it's impressive that people so young have already contracted this type of credit seeing as you have to present a very solid credit score and also collateral needs to bonded to the contract. It is quite possible that a very large proportions of these the collaterals all come from family owned estates or deposits. The second thing to point out are the various accountings of

interviewees who said they were saving up money to build their own houses. It could then be the case that sometime in the close future this saved up money could become a first installment for a bigger credit line or just simply be applied to buy or build the real estate directly.

Conclusions

This research aimed at answering the question of "How does Generation Z handle their financial behavior?". Two studies were applied in Rio Grande do Sul state in the very south of Brazil. The data came both from interviews and financial records of a credit union that operates in this region. First off a qualitative approach comprised of in depth interviews of Gen Z cast light to some very interesting aspects: (a) they learn financial practices through observation of good and bad examples coming from their family; (b) bidirectional socialization of financial practices happens when they learn to use new financial products and technologies and in turn teach their families about them; (c) they have a great entrepreneurial spirit and despite the fact that they seem currently satisfied in their current position, they also seek better opportunities and consider it a positive thing to have as many professional experiences as possible; (d) they are price sensitive; (e) they have overall good financial behavior, especially in terms of saving habits and financial organization habits; (f) they set up big goals like travelling and homeownership and they understand the trade-offs necessary to fulfill these goals; (g) they use technology such as the credit union's app in their advantage as ways to have more fluid and quick access, transparency and financial organization.

The second study applied quantitative statistical analyses to the Gen Z population of clients of said credit union. The following findings emerged: (a) access to digital channel as a major variable for predicting brand loyalty for Generation Z; (b) almost half of Gen Z have an average of roughly 5 times their income in deposits; (c) 15% of them use overdraft and credit card but in smaller relative commitment proportions (1,55 times their income vs 2,15 times of total population); (d) almost 15% of them contracted personal consumer credit but again int smaller relative commitment proportion(5,2 times their income versus 7,84 times of total population); (e) 1,35% of the population has real state credit; (f) they show the same over-indebtedness behavior of the total population.

A joint analysis of the qualitative and the quantitative studies point to evidence that Generation Z has overall good financial behaviors, especially saving habits and conscious use of credit. They set up big financial goals and have apparent discipline needed to carry them out. They are truly the "digital natives" that Generational Cohort Theory would imply they are and they actively use their knowledge and skills as a way to financially socialize their families in this ever-evolving complex financial landscape.

Limitations and future research

A major limitation of this study is the high specificity of the population studied. Despite the fact that a large number of qualitative interviews were applied and that the statistical analyses looked at over 10K client's financial records it is important to note that this population is geographically concentrated in 23 cities in the south of Brazil in a region heavily influenced by Italian (mostly) and German immigrants. This implies that the external validity is low and therefore the research is not suited for generalization.

This project adds and contributes to the current academic research regarding Generation Z which is still impressively very low. Future research suggestions are as follow: (a) further investigate the relationship between family socialization and good financial habits, specially saving and financial organization, especially the causality pathways linked family characteristic antecedents and family socialization as a mediator or moderator; (b) longitudinal research of how current Gen Z teens will live up or not to their current financial goals; (c) comparative analyses of Gen Z financial behavior against their parent's behavior; (d) further investigate the bidirectional socialization that happens when Gen Z starts using financial products and technologies that their parents and families have not used yet.

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