



The generation of virtual needs: Recipes for satisfaction in social media networking☆



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ABSTRACT

Successful social media networks motivate people to engage in behaviors that speak to their most basic psychological needs through citizenship in a virtual society. These environments provide individuals with the ability to build relationships (relatedness), exercise competence, and express autonomy. Recipes for satisfying these basic needs are vital to the success of virtual societies. This research contributes to existing literature by framing social media interaction using the self-determination theory (SDT); the study analyzes a sample of 570 social networking participants using the generations of baby boomers, generation X, and millennials with fuzzy set qualitative comparative analysis (fsQCA). Findings indicate that affinity, belonging, interactivity, and innovativeness are all base expectations for social media networking usage, depending on the generational cohort. Indeed, understanding the motivational needs of unique generational cohorts allows marketers to more effectively design precise adaptive strategies for their social media, which can impact engagement and thereby loyalty.

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1. Introduction

Social media infiltrates numerous aspects of people's daily lives; this effect supports and even changes people's needs from professional to creative and romantic. Platforms such as Instagram, LinkedIn, Match.com, and Pinterest have joined Facebook and others in becoming a daily ritual in many people's lives for various reasons. Social media promotes loyalty in many ways. Perhaps most notably, social media networking gives users the opportunity to engage in consumer-to-consumer (C2C) communications such as sharing experiences and knowledge through eWOM (electronic word of mouth), seeking information, and meeting people (Raab, Berezan, Krishen, & Tanford, 2015). Social media also enables organizations large and small to engage their target markets on a multitude of levels, thereby increasing the loyalty of their customers (Gruen, Osmonbekov, & Czaplowski, 2006). This engagement also applies to the social media initiatives that consumers create and support through a process called co-creation. Social media, in an unprecedented way, offers marketers the ability to gather valuable insights about consumers through multiple levels of engagement. Further, social media has become a vital part of the marketing mix. According to the Economist Intelligence Unit

(2015), social networks will become one of the top technological investments for many of the world's leading organizations.

The research shows that social media has a tremendous psychological effect on its users by influencing their sense of self-worth as well as their anxiety levels. This effect potentially leads to obsession and addiction, for better or for worse (Sheldon, Abad, & Hinsch, 2011). Successful social networking platforms motivate people to engage in social networking behaviors that speak to some of people's most basic psychological needs through citizenship in a virtual society. These platforms provide users with the ability to build relationships, exercise competence, and express autonomy. The self-determination theory (SDT) argues that the satisfaction of certain needs (competence, autonomy, and relatedness) affects behavior, such as engaging in social networking (Sheldon & Gunz, 2009; Sheldon et al., 2011). In effect, social networks have the unique ability to offer users a platform from which to satisfy each of these motivational needs. Specifically, users cannot fulfill their need for relatedness without social interaction of which users often value virtual interactions (via social networks) more highly than real life. Overall, the success and sustainability of social media networking platforms rely on the sense of community that the platforms create among members through communicating with one another (Berezan, Raab, Tanford & Kim, 2015; Rosenbaum, Ostrom, & Kuntze, 2005). However, this sense of community is only sustainable if the social media motivates users to engage in the networking that then continues to meet their need for relatedness. Many social networking sites would struggle to attract users and would also lose users without this promise of the relatedness. Furthermore, the recipes for meeting these needs might differ

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depending on the unique perspectives of those in the network, including members from a variety of segments such as different generations. For example, the approach that meets the unique needs of generation X might not meet the needs of millennials (Noble, Haytko, & Phillips, 2009). Therefore, understanding how the needs for relatedness, competence, and autonomy motivate members from different generations and how social networking meets those needs might be the secret recipe to affecting engagement. Ultimately this greater engagement would enhance the sense of community among users rather than create or increase gaps between them.

Much like many technological advances in the past and present, social media developments run the risk of increasing the generation gap. The research on millennials argues for both the positive and negative aspects of social networking as a part of life (Hershatter & Epstein, 2010). One positive aspect of growing up in a technologically innovative society is that younger generations find multitasking, for example, Facebooking and writing a paper simultaneously, to be less difficult than their older generational cohorts find multitasking to be (Carrier, Cheever, Rosen, Benitez, & Chang, 2009). However, aspects such as multitasking could also create a communication gap between the millennials and other generational cohorts in their social network communications.

To further explore this potential generation gap, this study conducts a survey of social media users from different generations with a quasi-convenience snowball sample. The study then analyzes the multi-group data with a fuzzy set qualitative comparative analysis (fsQCA). The study gathers insights into the virtual needs of baby boomers, generation X, and millennials and their motivations for using social networking through this analysis.

2. Conceptual framework

2.1. Generational needs and motivations

The macro-environment during the period of time in which people “come of age” greatly influences their values, attitudes, and behaviors (Howe & Strauss, 2007; Jackson, Stoel, & Brantley, 2011). Therefore, generational differences offer important insights into the motivators of social media behavior. This study evaluates the baby boomer, generation X, and millennial cohorts with regard to the motivating factors behind their social media networking behavior.

Prensky (2001) refers to baby boomers as “digital immigrants.” Born between 1946 and 1964, boomers grew up in times of significant and dramatic change. This group has successfully adopted new technologies, but they are not as comfortable with technology as the millennials are. The literature on baby boomers considers them to be hard working, to support social causes, and to focus on self-fulfillment and personal growth (Littrell, Ma, & Halepete, 2005; Obal & Kunz, 2013). The literature sometimes considers baby boomers the gloomiest generation but also refers to this cohort as the sandwich generation. Baby boomers either support their parents, their children, or both, and thus the group focuses on economic security and career success (Jackson et al., 2011; Pew Research, 2010).

Generation X (born between 1965 and 1983) went through challenging economic and social times, including two recessions (Eastman & Liu, 2012). The literature on generation X often depicts this cohort as having a higher education, having tech and media savvy, being entrepreneurial, being independent, seeking emotional security, and being informal (Howe & Strauss, 2007; Pew Research, 2010).

The literature on millennials (from 2002) portrays them as confident, connected, trustful, tolerant, well-traveled, open to change, group-oriented, highly educated, tech savvy, and generally self-centered (Pew Research, 2010; Syrett & Lammiman, 2003). Prensky (2001) refers to this group as “digital natives” due to their familiarity and comfort with the digital technology that has surrounded them throughout their lives. This familiarity has resulted in millennials growing up in a connected and fast-paced environment where they value collaboration and easy access to information (Obal & Kunz, 2013).

2.2. Social media communication

The research shows that the virtual experiences of interactivity, affinity, belongingness, and innovativeness address several types of social needs. The communication between consumers, also known as consumer-to-consumer or C2C, allows for both structural and experiential interactivity (Chan & Li, 2010). The properties and features of the particular social media platform, such as informativeness and navigability, provide the structural route to interactivity. Whereas, the social bonds and enjoyment aspects of experiential interactivity measure the hedonic pleasure that people derive from C2C communication. The research on Facebook in particular finds that these interactions can come in multiple forms: negative ones such as addition and stalking, as well as positive ones such as personal branding and the building of brand relationships (Patterson, 2012).

Krishen, Trembath, and Muthaly (2015) propose a model of a social network for building loyalty that they base on affinity. In this model, they define affinity in terms of building connections between people that ultimately leads to higher satisfaction and higher loyalty to the social platform. Multiple theories speak to the importance of the relationships and the affinity from social media communication, such as the social presence theory (Lin, Fan, & Chau, 2014), the usability–sociability framework (Preece & Maloney-Krichmar, 2003), and the social influence theory. The social presence theory argues that in the context of online communities, the fact that individuals are unable to see each other makes them more likely to communicate personal and surreptitious information. This communication leads to connections with similar others over time and creates a contagious effect of self-disclosure and trust (Preece & Maloney-Krichmar, 2003) that builds the social network’s affinity.

Innovativeness is a trait that has a high association with the idea of adopting change and trendy technologies at a faster pace (Pagani, Hofacker, & Goldsmith, 2011). Information and communication technology’s (ICT) innovativeness is a significant predictor of the usage of a social networking site (Zhong, Hardin, & Sun, 2011). This description is consistent with other views of innovativeness, such as domain-specific ones, that also measure the greater use of social networking (Pagani et al., 2011).

Lin (2008) defines a sense of belonging as an individual’s perception of positive membership in a virtual community. The communication in social media platforms continues to rise, even in virtual world environments such as Second Life. This communication provides individuals with social interaction and feelings of connectedness and belonging (Krishen, Hardin, & LaTour, 2013). Several researchers find support for the building of belongingness from social media communication and the communication’s effect on both satisfaction and loyalty (Krishen et al., 2015; Lin et al., 2014).

2.3. Self-determination theory

The SDT combines individual differences with motivation. This theory states that the satisfaction of core psychological needs shapes behavior, growth, and development. The literature defines SDT as a metatheory that argues that an individual’s core needs fall into three main categories: competence (desire for mastery), relatedness (desire to have others care, care for others, and to have a relation with significant others), and autonomy (sense of freedom and volition) (Ryan & Deci, 2000). The theory argues that these three needs are central to the propensities for growth, integration, social development, and well-being. The SDT identifies relevant regulatory styles, the perception on the loci of causality, and regulatory processes with a spectrum from no motivation to intrinsic motivation. At the furthest extreme, self-determination requires a high level of intrinsic motivation, a high perception on the internal locus of causality, and high intrinsic regulation (Sweeney, Webb, Mazzarol, & Soutar, 2014). The opposite end of the spectrum, no motivation, is the result of no regulation, impersonal

perception on the locus of causality, and lack of control. Higher levels of self-determination therefore have an association with more positive outcomes. Autonomous motives provide intrinsic motivation whereas external regulations control motives (Minton, Kahle, & Kim, 2015).

The research applies the SDT as an explanation for social media networking behavior, in particular focusing on the need for relatedness. Although extrinsic motivation might apply to social media usage that provides rewards, such as with gaming applications, social networking sites do not extrinsically reward their use. Thus, the range of motivations that apply to social media networking behavior from the SDT exists in the intrinsic motivation spectrum (Hoffman & Novak, 2013). Sheldon et al. (2011) show that social networking usage increases feelings of connectedness and satisfies individual relatedness needs; however, disconnection can still exist even when individuals engage in social networking usage. In fact, these authors suggest that the use of social networking and that networking does not solve the underlying issues such as loneliness and disconnection but can instead be a temporary fix rather than a permanent resolution to such issues.

3. fsQCA study

3.1. Sampling and measures

This study uses a quasi-convenience snowball sample to collect the data in order to obtain the correct generational cohorts and to get a pre-requisite number of subjects per generation. The screening of subjects comprises the identification of an age cohort and social networking membership by using an online survey as the collection method. All of the measures use extant and valid scales from the literature and all constructs have acceptable reliabilities of 0.7 or higher. Table 1 contains the pertinent scale details.

Table 1
Construct items.

Construct and reference	Items
Belonging (Lin, 2008)	<ol style="list-style-type: none"> 1. I am proud to be a member of <...>. 2. I enjoy being a member of <...>. 3. I feel a strong sense of belonging to the <...> community.
Interactivity (McMillan & Chavis, 1986)	<ol style="list-style-type: none"> 1. Members on <...> influence my thoughts and activities. 2. I am able to influence the actions and feelings of other members on <...>. 3. My opinions matter to other members on <...>. 4. I care about what other members think of my actions on <...>. (Interactivity; McMillan and Chavis (1986)
Affinity (Krishen et al., 2015)	<ol style="list-style-type: none"> 1. I feel my needs (such as social and recreational activities) are met on <...>. 2. I can get help on <...> if I need it. 3. Participation on <...> is worth my time. 4. People on <...> look out for me.
Emotional connection (McMillan & Chavis, 1986)	<ol style="list-style-type: none"> 1. I feel I am well understood by other members on <...>. 2. I have the feeling of closeness on <...>. 3. I get along well with other members on <...>. 4. I feel other members on <...> are friendly to me.
Satisfaction (Krishen et al., 2015; Lin, 2008)	<ol style="list-style-type: none"> 1. Using the online community helps to satisfy my information needs. 2. Overall, I am satisfied with the online community. 3. Using the online community helps to satisfy my social needs. 4. Overall, participation in the online community has been an unsatisfactory experience.
Innovativeness (Donthu & Gilliland, 1996)	<ol style="list-style-type: none"> 1. I like to take chances. 2. I like to experiment with new ways of doing things. 3. New products are usually gimmicks.

Note: The survey asks respondents to provide their favorite social networking site and then bases the questions on their choice. The table denotes this site with <...>.

Table 2
Construct descriptions: baby boomers.

Construct	Range of construct score	Threshold for full non membership	Maximum point of ambiguity	Threshold for full membership
Belonging	1–729	2	180	729
Interactivity	1–729	1	60	448
Affinity	1–6561	7	600	4032
Emotional_connection	1–6561	8	1296	5832
Satisfaction	1–6561	10	432	2744
Innovativeness	1–729	27	128	405

3.2. Procedure and analysis

The analysis uses Likert scales to calibrate the survey and uses the fsQCA technique to measure the data because this technique appropriately captures the degree of agreement in the qualitative statements (Emmenegger, Schraff, & Walter, 2014). The first step in the fsQCA is the calibration. This step maps the original values for all variables (conditions) into membership scores that range from zero to one.

The next step divides the data into the following generational cohorts: baby boomers (1946–1964), generation X (1965–1983), and millennials (1984–2002) (Elmore, 2014; Markert, 2004). After deleting the data with missing items, baby boomers contain 113 observations, generation X has 181, and millennials have 276. Tables 2, 3, and 4 depict the ranges for each construct and the fuzzy set thresholds for the three age groups, respectively. The number of items per construct range from three to four, as in Table 1.

The analysis converts the responses to a fuzzy scale by first multiplying each item construct to obtain a construct score. For example, the lowest and highest construct score on a 9-point scale for a 3-item construct is 1 and 729. Next, the analysis selects 0.05 as the threshold for full nonmembership that is equal to the multiplicative product score where 8% of the distribution of the product scores are below the threshold. The median product is the 0.5 membership score (maximum point of ambiguity) and the multiplicative product score at 92% of the total product scores is the threshold for full membership (the 0.95 value). The next step is to use the fsQCA software to convert these constructs into a fuzzy scale between zero and one (Ragin, Drass, & Davey, 2006).

Table 3
Construct descriptions: generation x.

Construct	Range of Construct Score	Threshold for Full Non Membership	Maximum Point of Ambiguity	Threshold for Full Membership
Belonging	1–729	12	343	729
Interactivity	1–729	2	125	648
Affinity	1–6561	18	1008	4608
Emotional_connection	1–6561	80	1920	5184
Satisfaction	1–6561	40	504	3584
Innovativeness	1–729	45	210	512

Table 4
Construct descriptions: millennials.

Construct	Range of construct score	Threshold for full non membership	Maximum point of ambiguity	Threshold for full membership
Belonging	1–729	8	252	576
Interactivity	1–729	3	128	504
Affinity	1–6561	18	720	3528
Emotional_connection	1–6561	96	1176	4032
Satisfaction	1–6561	60	588	2744
Innovativeness	1–729	72	196	512

Table 5
Solutions for baby boomers.

Complex solution				
Frequency cutoff: 2.00		Raw coverage	Unique coverage	Consistency
Consistency cutoff: 0.865416				
c_affinity * c_interactivity * c_belonging		0.626523	0.230504	0.795718
c_innovativeness * c_emotional * ~c_affinity * ~c_belonging		0.295695	0.023964	0.887805
c_innovativeness * ~c_affinity * c_interactivity * ~c_belonging		0.302600	0.029042	0.923172
~c_innovativeness * ~c_emotional * c_affinity * c_interactivity		0.293258	0.008327	0.876214
~c_innovativeness * c_emotional * c_affinity * c_belonging		0.353371	0.007108	0.847541
Solution coverage: 0.742689				
Solution consistency: 0.771356				
Parsimonious solution				
Frequency cutoff: 2.00		Raw coverage	Unique coverage	Consistency
Consistency cutoff: 0.865416				
c_affinity		0.750203	0.020715	0.746564
c_interactivity		0.763201	0.057271	0.724225
c_emotional * ~c_belonging		0.395410	0.002843	0.824651
c_innovativeness * c_emotional		0.618603	0.005483	0.849888
Solution coverage: 0.856214				
Solution consistency: 0.682642				
Intermediate solution				
Frequency cutoff: 2.00		Raw coverage	Unique coverage	Consistency
Consistency cutoff: 0.865416				
c_belonging * c_interactivity * c_affinity		0.626523	0.230504	0.795718
c_interactivity * c_affinity * ~c_emotional * ~c_innovativeness		0.293258	0.008327	0.876214
~c_belonging * c_interactivity * ~c_affinity * c_innovativeness		0.302600	0.029042	0.923172
~c_belonging * ~c_affinity * c_emotional * c_innovativeness		0.295695	0.023964	0.887805
c_belonging * c_affinity * c_emotional * ~c_innovativeness		0.353371	0.007108	0.847541
Solution coverage: 0.742689				
Solution consistency: 0.771356				
Predictive validity testing				
	Training sample (n = 56)		Validity sample (n = 57)	
	Overall solution consistency	Overall solution coverage	Overall solution consistency	Overall solution coverage
Satisfaction	0.754923	0.828331	0.720000	0.772225

3.2.1. Estimating complex causal statements (recipes)

The estimation splits the sample into two subsamples: the first is a training sample ($n = 56$ for baby boomers, $n = 90$ for generation X, and $n = 138$ for millennials) with the second subsample ($n = 57$ for baby boomers, $n = 91$ for generation X, and $n = 138$ for millennials) providing validation for the results.

3.2.2. Using original calibrated constructs

Tables 5, 6, and 7 show the most accurate among the complex, parsimonious, and intermediate solutions for the three age groups, respectively, to investigate the outcome construct ($c_{\text{satisfaction}}$) in terms of the five antecedent variables. The frequency cutoff is two, and the consistency cutoff is 0.80 for the analysis. Many of the solutions have high individual consistency scores, and the raw coverages meet the preferable range of values: 0.25 to 0.65 (e.g., Woodside, 2013). The solutions in Tables 5, 6, and 7 show the resulting recipes that have higher cutoffs for the consistency and the raw coverage.

3.2.3. Testing for predictive validity

The analysis performs a series of fsQCAs to examine the configurations for $c_{\text{satisfaction}}$ in order to test for predictive validity, (Wu, Yeh, Huan, & Woodside, 2014). The analysis tests the overall solutions from the training subsample for their ability to predict the same outcome as the validation subsample. The lower parts of Tables 5, 6, and 7 summarize the findings from these analyses. The results show acceptable consistency and coverage.

4. Conclusions and managerial implications

This research contributes to the literature by framing social media interaction through the lens of the self-determination theory (SDT). Indeed, understanding the motivational needs of unique generational cohorts allows marketers to more effectively design precise adaptive strategies for their social media, which can impact engagement and thereby loyalty. As Fig. 1 shows, the three generations display varying recipes for social media satisfaction, and those levels fit well with the emergent theoretical framework, the SDT. Furthermore, the constructs of affinity, belonging, interactivity, and innovativeness are all base expectations for social media usage, depending on the generational cohort.

According to the SDT, the feeling of closeness and a sense of connection satisfies the need for relatedness. The affinity and belonging constructs represent the relatedness need with regard to social media behavior. Specifically, affinity is a measure of the way in which social media meets individual social and informational needs through communication with other members. Likewise, the belonging construct supports the satisfaction of the relatedness need by measuring a positive sense of membership in a virtual community. The theme of affinity spans all three generations; as such, affinity is one of the most fundamental benefits of participating in social media (Krishen et al., 2015). In this framework, the belonging construct also ties directly to this dimension for baby boomers. This construct supports the relatedness need via members' enjoyment and pride through their individual identity with a community. The research (e.g., Hoffman & Novak, 2013) already shows the fundamental importance of satisfying the relatedness need through social media communications. This study's finding

Table 6
Solutions for generation x.

Complex solution			
Frequency cutoff: 2.00 Consistency cutoff: 0.822268	Raw coverage	Unique coverage	Consistency
~c_emotional * c_affinity * ~c_belonging	0.361508	0.017003	0.893151
~c_emotional * c_interactivity * ~c_belonging	0.385781	0.046451	0.869722
~c_emotional * c_affinity * c_interactivity	0.383317	0.014662	0.898095
c_innovativeness * c_affinity * c_interactivity	0.553598	0.037826	0.880463
c_innovativeness * c_interactivity * c_belonging	0.496673	0.004559	0.829765
Solution coverage: 0.781542 Solution consistency: 0.762747			
Parsimonious solution			
Frequency cutoff: 2.00 Consistency cutoff: 0.822268	Raw coverage	Unique coverage	Consistency
c_affinity * ~c_interactivity	0.393174	0.067398	0.804995
~c_emotional * c_interactivity	0.448743	0.038689	0.823237
c_innovativeness * c_interactivity	0.613603	0.180754	0.825187
c_innovativeness * c_emotional * ~c_belonging	0.335017	0.021562	0.843362
Solution coverage: 0.791153 Solution consistency: 0.750555			
Intermediate solution			
Frequency cutoff: 2.00 Consistency cutoff: 0.865416	Raw coverage	Unique coverage	Consistency
~c_belonging * c_interactivity * ~c_emotional	0.385781	0.046451	0.869722
~c_belonging * c_affinity * ~c_emotional	0.361508	0.017003	0.893151
c_interactivity * c_affinity * ~c_emotional	0.383317	0.014662	0.898095
c_belonging * c_interactivity * c_innovativeness	0.496673	0.004559	0.829765
c_interactivity * c_affinity * c_innovativeness	0.553598	0.037826	0.880463
Solution coverage: 0.781542 Solution consistency: 0.762747			
Predictive validity testing			
	Training sample (n = 91)	Validity sample (n = 90)	
	Overall solution consistency	Overall solution coverage	Overall solution consistency
Satisfaction	0.77057	0.756445	0.704110
	Overall solution consistency	Overall solution coverage	Overall solution consistency
			0.745733

augments the research by demonstrating in Fig. 1 that satisfying this SDT need is critical to motivating social media behavior for all three generations.

The need for competence is imperative to the social media networking experience of the baby boomers and generation X. The sense of being effective and masterful in one's experience satisfies this need. Regarding one's experience with social media networking, the interactivity construct, or knowing that one's dialog with other members makes a difference or matters, satisfies this need. Interactivity underscores an individual's need to influence and to receive suggestions from others in meaningful ways and is a basic offering of many social media platforms.

According to the SDT, the need for autonomy represents the feeling of being volitional and self-expressive, or the ability to say and do what one wants without concern about what others might think. In this study this need is important to members of generation X. The construct of innovativeness, where members enjoy taking risk and finding new ways of doing things, satisfies this need.

Finally, by establishing a link between motivational needs for social media networking and satisfaction per generation, this research provides marketers with a framework from which to better understand which aspects of each platform meet the needs of different generational segments. For example, Raab et al. (2015) identify posting WOM, seeking WOM, and experiencing benefits as sub-constructs of the social media behavior construct; this study extends this idea by linking generational cohorts to motivations at a higher level. The present study suggests potential motivations for the broader social media behaviors that Raab et al. (2015) identifies, essentially carving out reasons for why the different generations engage in various levels of involvement with social media.

5. Limitations and future research

This study has certain limitations that future research should consider. First, the study does not specifically mention all social media platforms (such as Instagram and Pinterest) during the data collection. The use of a snowball sample with an online survey is also a limitation, and the future research could use a combinatorial optimization-based sample instead (Raschke, Krishen, Kachroo, & Maheshwari, 2013). Further, another limitation to the sample is the use of residents in the United States only. Finally, the survey does not provide for the study of demographic constructs that are aspects of consumer behavior, such as sexual orientation, that the literature under-studies. For example, recent research highlights the LGBTQ segment as being largely misunderstood by marketers yet potentially very lucrative for them (Berezan, Raab, Krishen, & Love, 2015).

Because social media is a vital aspect of the global infrastructure, research on cross-cultural and international consumer behavior should address the role of SDT. Specifically, multi-generational social media networking behavior should be researched from the perspective of self-construal, or the basis of self-definition and the way in which a person relates independently (individual) versus interdependently (collective). Additionally, future research should consider the latest social media platforms as well as follow the communication abilities and preferences of each generation over time. This consideration might shed some light on how the use of social media affects users of different generations in the development of their social media communication skills, preferences, and motivating factors over time.

Table 7
Solutions for millennials.

Complex solution			
Frequency cutoff: 2.00 Consistency cutoff: 0.823499	Raw coverage	Unique coverage	Consistency
c_affinity	0.751802	0.048599	0.720755
c_innovativeness * c_emotional	0.533387	0.020977	0.800145
c_emotional * c_belonging	0.624500	0.013611	0.743566
~c_emotional * c_interactivity * ~c_belonging	0.330584	0.005364	0.773656
~c_innovativeness * ~c_emotional * c_interactivity	0.348759	0.001601	0.785431
Solution coverage: 0.861490 Solution consistency: 0.644736			
Parsimonious solution			
Frequency cutoff: 2.00 Consistency cutoff: 0.823499	Raw coverage	Unique coverage	Consistency
c_affinity	0.751802	0.017374	0.720755
c_interactivity	0.729304	0.028583	0.694231
c_innovativeness * c_belonging	0.554524	0.012730	0.819742
c_emotional * c_belonging	0.624500	0.010729	0.743566
Solution coverage: 0.873579 Solution consistency: 0.628803			
Intermediate solution			
Frequency cutoff: 2.00 Consistency cutoff: 0.823499	Raw coverage	Unique coverage	Consistency
c_affinity	0.751802	0.048599	0.720755
c_belonging * c_emotional	0.624500	0.013611	0.743566
c_emotional * c_innovativeness	0.533387	0.020977	0.800145
c_interactivity * ~c_emotional * ~c_innovativeness	0.348759	0.001601	0.785431
~c_belonging * c_interactivity * ~c_emotional	0.330584	0.005364	0.773656
Solution coverage: 0.861490 Solution consistency: 0.644736			
Predictive validity testing			
	Training sample (n = 138)		Validity sample (n = 138)
	Overall solution consistency	Overall solution coverage	Overall solution consistency
Satisfaction	0.669883	0.856773	0.688785
			Overall solution coverage
			0.824869

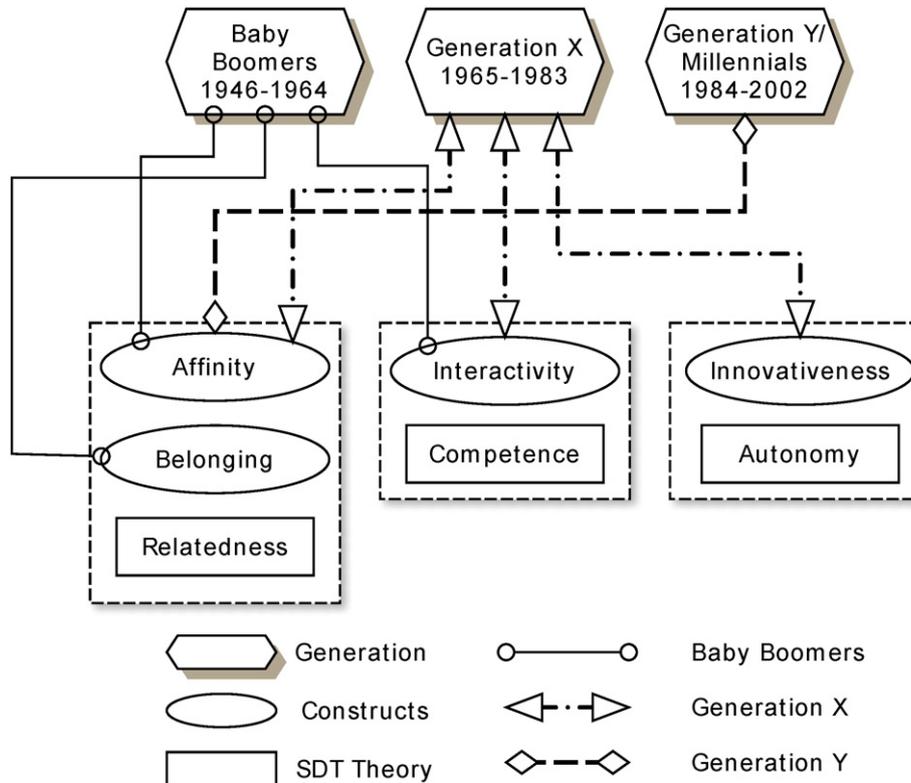


Fig. 1. SDT generational framework.

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