

EXPERIENCES OR MEMORIES... EMOTIONAL OR FINANCIAL DEPRIVATION... WHAT CAUSES COMPULSIVE BUYING TENDENCY MORE?*

YAŞANANLAR MI? HATIRLANANLAR MI? DUYGUSAL YOKSUNLUK MU? EKONOMİK YOKSUNLUK MU? HANGİSİ KOMPULSİF SATIN ALMA EĞİLİMİNE DAHA FAZLA YOL AÇAR?

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Abstract

Adapting the theories of life course and escape, this article examines how family disruptions during childhood could lead to undesirable consequences for compulsive buying tendency in the following years. Unlike previous studies that have only focused on the negative impact of family disruption on children, in this study, the positive effects have also been accounted for. The ongoing debate about which factor causes compulsive buying tendency more is discussed in light of the findings gathered using the data obtained from 660 participants via an online survey. The findings indicate that the lack of emotional resources provided by the

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family plays a more important role in compulsive buying tendency than financial resources. The findings also show the importance of memories (past negative time perspective) over real-life experiences (disruptive family events).

Keywords: Compulsive buying tendency, The life course theory, Disruptive family events, Family resources, Past negative time perspective

Öz

Yaşam seyri ve kaçış teorilerinden yola çıkılarak oluşturulan bu çalışmada, çocukluk döneminde aile içerisinde yaşanan sorunlu durumların ileriki yıllarda kompulsif satın alma eğilimi özelinde nasıl istenmeyen sonuçlara yol açtığı araştırılmaktadır. Halihazırda var olan ve aile içi sorunların olumsuz etkilerine odaklanan çalışmaların aksine, bu çalışmada sorunların olumlu etkileri de hesaba katılmıştır. Çevrimiçi anket yoluyla ulaşılan 660 katılımcının verisi kullanılarak elde edilen bulgular ışığında, kompulsif satın alma eğilimine hangi faktörlerin daha fazla yol açtığına yönelik tartışmalara katkı sağlanmıştır. Analizler sonucunda ailenin çocuğa sunabildiği maddi kaynaklardan ziyade manevi kaynaklarda yaşanan yoksunluğun kompulsif satın alma eğiliminin ortaya çıkmasında büyük bir rol oynadığı ortaya çıkmıştır. Bulgular aynı zamanda gerçek hayatta yaşanan durumlara (ailede yaşanan sorunlu durumlar) kıyasla hatıraların (olumsuz geçmiş zaman perspektifi) daha önemli olduğunu ortaya çıkarmıştır.

Anahtar Kelimeler: Kompulsif satın alma eğilimi, Yaşam seyri teorisi, Ailede yaşanan sorunlu durumlar, Ailenin çocuğa sunabildiği kaynaklar, Olumsuz geçmiş zaman perspektifi

1. Introduction

Throughout history, society and parents have largely ignored the importance of children (Aries, 1962; Ryan, 2013; Ferraro, 2004; Mayall, 2013). However, the 20th century has seen major changes in the social attitudes toward children, leading society to accept children as precious human beings (Therbon, 2004). The growing importance of children for family and society has created a growing interest among anthropology, psychology, sociology, biology, economics and criminology scientists. Since the 1950s, several scientists have begun to develop theories explaining the dynamics and nature of child-parent relationships (e.g., Duvall, 1958; Ainsworth et al., 1969).

Scientific research examining the importance of family's involvement in child's cognitive development and psychological well-being dates back to the 1940s. After conducting a series of observational and experimental studies, a renowned psychoanalyst René Árpád Spitz has found that children who do not have caring parents tend to have depression and lack of interaction with adults (Spitz, 1949). Three decades later, his findings have been confirmed by the Behavioral Science Unit of the Federal Bureau of Investigation (FBI), which has been established to understand the mentality of serial offenders (Douglas et al., 1986). FBI agents have found that the majority of violent criminals had been abused by their parents, been raised in disruptive families in which parents were mainly absent from home and suffering from substance addiction and psychological problems (Ressler et al., 1995). While the early studies of family relations and deviant behaviors were mainly on violent crimes, it was not long before researchers found similarities between deviant behaviors and compulsive buying. In

this context, it is significant to note that both violent crimes and compulsive buying were considered deviant behaviours in terms of being socially unacceptable and having negative consequences for both society and human beings (Dittmar, 2004; Hoyer & MacInnis 2010).

Much has been written about the events that disrupt families' structure, thus influencing their members negatively. However, rarely has this topic been addressed by comparing the agonising real-life experiences to the representation of these experiences, as in painful memories. Since memories may differ from reality due to the human mind's ability to create deceptive and false memories, knowing which causes individuals to buy unneeded items is significant. Our primary focus is to gain a clear picture of the effects of major problems in the family and socio-economic and emotional deprivation experienced during childhood on a child's consumption habits and time perception in the future.

2. Theoretical Framework

Many significant theories of child-parent relationships have dealt with children's behaviours at present, such as attachment theory (e.g., Ainsworth et al., 1969) and stress theory (Hill, 1958). However, one of them stands out for linking the past to the future, the life course theory. Being derived from the ethnographic study of sociologists William Isaac Thomas and Florian Znaniecki (1918), in which social changes such as marriage, birth and death of family members had been observed, life course theory assumes that micro and macro changes in family structure affect child's behaviours in the future (White et al., 2019; Bengston & Allen, 2009; Moschis, 2007). Although Thomas and Znaniecki's book has received credible support and attention from academics, it is also important to recognise that their study did not include the effect of change in the family on children. So, in numerous studies, researchers attempted to address these issues by exploring the circumstances and factors that might be described as significant changes for families (Green, 2016; Uhlenberg & Mueller, 2003; Settersten Jr., 2018). However, in contrast to claims that life course theory explains the changes in family structure, there is still some disagreement among researchers due to the rapid changes in family structure and definition of family in recent years (Alwin, 2001; Settersten, Jr. 2017; 2018; Wellman, 2018). Nonetheless, the existence of findings that match the assumptions generated from life course theory proves that, despite the changes, life course theory is still one of the fundamental theories that explain family's influence on a child's future behaviour (e.g., Baker et al., 2013a; 2013b). These assumptions were supported by studies, which found that changes in the family during childhood play a prominent role in emotional, social, financial, and physical problems in adulthood (McLeod & Almazan, 2003; Uhlenberg and Mueller 2003)

Another theoretical perspective adopted in this study is the escape theory, which assumes that individuals engage in self-destructive behaviours as a coping mechanism for difficult emotions and negative situations (Hilton et al., 1989). Self-destructive behaviours, which can be mainly seen in substance use and gambling addiction, have received credible support in compulsive buying

literature, which considered compulsive consumption as a shopping addiction (Dittmar, 2004). Thus, an understanding of the similarities between compulsive buying and other types of addictions may be beneficial to understanding the connection between them. For instance, both addiction and compulsive buying cause a strong sense of shame, regret and guilt (Elster, 1999; O’Guinn & Faber, 1989). In addition to this, the roots of both addiction and compulsive buying can be traced back to the family (Nakken, 1996; Rindfleisch et al., 1997; Friese, 1992). Last but not least, the expectation of relief from anxiety and tension as a response to negative emotions and psychological problems plays a crucial role in both addiction and compulsive buying (Griffin et al., 2005; O’Guinn & Faber, 1989; Lejoyeux & Weinstein, 2010; Solomon, 2018). These examples illustrate that escape theory is one of the most available theories to explain compulsive buying behaviour. In several studies in which compulsive buying and family disruptions were analysed, researchers have found that children living in a dysfunctional family with indifferent and non-responsive parents have shown compulsive tendencies (Benston & Gengler, 2004; Baker et al., 2013b). Similar findings have been obtained in the study of Rindfleisch and his colleagues (1997). They reported that children who had faced negative situations in their families and, due to this, had been unable to receive adequate support from their parents have reported engaging in compulsive buying behaviour.

Most researchers have focused on the negative effects of disruptive family events (e.g., Charlesworth 2019; Woody & Hutchison 2019; Settersten Jr. 2018; McLeod & Almazan, 2003), despite conclusive evidence showing that the effects might be non-existent or positive as well (Torche et al., 2024; Aquino et al., 2022). For instance, the death of an abusive parent could create a sense of relief for the abused child and could lead to a positive reaction to the disruption (Umberson, 2006). Furthermore, while the divorce of a parent could yield negative feelings, the divorce of the abusive parents might lead to positive outcomes (Wertlieb, 2006). In addition, consistent with the previous statement, Doty and Mortimer (2018) have found an increase in the emotional bond between mother and child after parental divorce, contrary to the decrease in the father-child bond. Thus, we can assume that even the same event experienced by the same individual might have different reactions. We should also know that the absence of any reaction at the time of the disruption might turn into a negative one over time (Wallerstein, 1991). Similarly, as time goes on, a negative reaction might turn into a non-existent one due to the child’s ability to deal with the disruption (Sun & Li, 2002). Although researchers have shown immense interest in the negative outcomes of disruptions for decades, the existence of different outcomes has been increasingly emphasized in recent studies. Thus, supporting the distinction between negative and positive aspects of disruptions is an essential part of this study.

2.1. Compulsive Buying

Being referred to as the ‘dark side of consumer behaviour’ (Mick, 1996; Hoyer & MacInnis, 2010; Moschis, 2017), compulsive buying has been defined as “chronic, repetitive purchasing that occurs as a response to negative events or feelings” (O’Guinn & Faber, 1989: 149). Although, other various definitions have been suggested in the literature, this definition differs to some extent from others

(e.g., Edwards, 1993: 67; Black et al., 1998: 960; Black, 2007: 124; Dittmar, 2004: 414), as it clearly shows negative emotions as an important reason for excessive buying, while others mainly focus on negative consequences of it.

Pieces of evidence from actual studies of compulsive buying show that it occurs as a response to past experiences (Rindfleisch et al., 1997; Benson & Gengler 2004; Baker et al., 2013b; David et al., 2024), has excessive and repetitive aspects, creates problems both for the buyer and others related to the buyer, creates a strong and irresistible urge and, is impulsively difficult to control (O'Guinn & Faber, 1989; Dittmar, 2004). Thanks to the research on compulsive buying, we now have a great deal of knowledge of the factors leading to it. In many studies, these factors have been classified into several categories such as cultural, environmental, psychological, situational (Valence et al., 1988), familial (Benson & Gengler, 2004), genetic (Black, 1998; Black, 2007), sociological, (Faber & O'Guinn, 2008), biological (Schlosser et al., 1994), neurobiological and developmental (Black, 2007). Since one of the objectives of this article is to examine the effect of family on compulsive buying, the discussion will essentially focus on familial factors.

As mentioned previously, children who grow up in abusive, violent and disruptive family environments have a higher tendency for compulsive buying (Benson & Gengler 2004; Baker et al., 2013b; Rindfleisch et al., 1997). This claim has been supported by studies that have found that compulsive buying behaviour had risen at a significant rate when tangible and intangible resources (financial and emotional support) provided by family members had decreased due to the increasing disruptive events in the family (Baker et al., 2013b; Rindfleisch et al., 1997). It appears that neglected children living in broken homes with absent parents receive material objects as a gift to fill the void created by their parents; hence, as they grow, material possession plays a significant role in their lives (Benson & Gengler, 2004).

2.2. Disruptive Family Events

Since, compared to other people, interaction among family members is considered to be more intense, the feelings of a family member may affect others' psychological well-being to a great extent (Sorokin, 1970). Similarly, being the most vulnerable among family members, disruptions might be more severe for children. Berman (1977) has contributed significantly to family literature by evaluating the factors changing the intensity of a child's reaction to disruptive events. He reported that the personality and age of the child, the existence of previous disruptions, members' ability to adjust to changing conditions, the existence of support to the child during disruption and the degree of parent-child communication after the disruption might be significant for the child's reaction to disruptions.

Many conceptual, theoretical and applied studies could be cited regarding the variety of disruptive events concerning the family. Some of these events can be stated as follows: divorce of parents, conflict among parents (Forehand, et al., 1991), remarriage of parents, the death of family

members (Newcomb et al., 1981), living with step-parent (Hill, 1958; McFarlane et al., 1995), mental or physical illness of family members (Fuller & Warner, 2000; Garasky et al., 2009; Stern et al., 1999; Winnicott, 1995), sexual or physical abuse of family members (Kashani et al., 1992; Adams, 2006; Finkelhor, 1978; Magalhaes et al., 2009), being away from family members due to the immigration (Milewski, 2007), imprisonment of parents (Loper et al., 2015; Turney & Goodsell, 2018), absence of parents from home due to the workload (Settersten Jr., 2007), unemployment of parents and decline in household income (Hill, 1958).

2.3. Family Resources

Researchers in child development have long ago accepted the importance of a family's financial and emotional contribution to a child's cognitive, psychological, physical and behavioral development. One of the first studies on family support's involvement in child development was carried out in 1928 by sociologist Pitirim Sorokin. He has reported that children raised in better economic conditions and established healthy relationships with their parents exhibit better behaviours. In contrast, children living in dysfunctional families with indifferent parents show opposite reactions (Sorokin, 1928). Consistent with this affirmation, a relation between family resources and a child's development has been found in several studies. For instance Woody and Hutchinson (2019) have focused on the benefit of play on a child's emotional development and the importance of proper nutrition on physical development. Kasser (2002) has noted that as a consequence of growing up in poverty, children tend to place more emphasis on acquiring material possessions. Despite the improvement in their financial situation in the following years, they continue to display the same attitude as grown-up individuals.

Some important and highly used resources provided to children by their families have been introduced in several studies. Researchers have suggested a wide range of family resources, including basic resources such as food, clothing, shelter (Sugarman, 1995), security (Dollahite, 1991); emotional resources such as role modelling, controlling (McLanahan, 1985), providing emotional support and unconditional love, (Barranti, 1985), spending time with family and child (Van Horn et al., 2001), showing attention (Myers & Myers, 2014), teaching life skills (Cherlin, 2010); and other resources such as creating education opportunities, attending entertainment, recreation and social activities (Winnicott, 1995; Taylor et al., 1993), spending money (Dollahite, 1991), taking child on vacation, providing child care (Foster, 2002), providing health care, buying toys (Taylor et al., 1993).

2.4. Time Perspective

It has long been known that, besides the physical dimension, time also has a psychological dimension (Block, 1989). We can see the proof of this claim in several studies in which the perception of time differed from one person to another based on past experiences (Poynter, 1989; Arstilla and Lloyd, 2014; Kanai, 2014). Defined as "the partitioning of our personal, ongoing experiences into

time frames, time zones, or temporal categories.” (Zimbardo et al., 2017b: 41), time perspective has been found to play an essential role in the interpretation of past experiences (Keough et al., 1999).

Zimbardo and Boyd (2008), known for their research on the time perspective, have stated that time is relative, and the rate at which it passes and how it is experienced depends on environmental factors, as well as the emotional state and perception of the person. In support of Zimbardo and Boyd’s statement, Droit-Volet (2014) has also mentioned that people have the perception that time speeds up in case of happy moments and slows down in traumatic moments. Apart from emotional state and mood, factors such as upbringing, living conditions, family, traumatic experiences, socio-economic conditions, social class, socio-cultural environment, education level, religion, age, and gender were found to be associated with the perception of time (D’Alessio et al., 2003; Fieulaine & Apostolidis, 2015; Holman, 2015; Sircova et al., 2014; Zimbardo & Boyd, 2008).

3. Research Question, Hypothesis and Model

In this article, we identified three sets of questions below:

1. To what extent do individuals who experienced disruptions in their families and, due to these disruptions, were unable to receive sufficient support from their families during childhood get attached to material possessions to escape from the sense of deprivation?
2. As people age, does the remaining effect of childhood disruptions lessen, and people’s perception about the past soften?
3. Are real experiences (what happened) or memories (how people remember the past) more dominant in people’s attachment to material possessions?

In line with the various findings, the hypothesis tested in this study to answer the research questions above can be stated as follows:

Disruptive Family Events and Family Resources:

As we noted previously, the research literature suggests that family disruptions affect household income and, hence, cause a decrease in family resources both financially and emotionally. Correlational support for the claim has come from various studies in which the relationship between disruptive family events and family resources was analysed (e.g., Baker et al., 2013a; 2013b; Rindfleisch et al., 1997). An explanation for this relation can be obtained from a particular study. Rindfleisch and his colleagues (1997) argued that, in case of parental divorce or separation, household income declines when the father moves from home, and when the mother decides to work, children’s time spent with parents decreases. Similarly, Umberson (2006) has also noted the lack of communication between father and child after divorce.

H₁: Disruptive family events will negatively affect family resources.

H_{1a}: Disruptive family events will negatively affect emotional family resources.

H_{1b}: Disruptive family events will negatively affect financial family resources.

Family Resources and Compulsive Buying Tendency:

It is a well-known fact that the effect of derivation experienced in childhood still retains control over the behaviours and decisions of individuals over the years to follow (An et al., 1993; Valence et al., 1988). The foundation of this fact can be seen in numerous studies that have found inadequate financial and emotional support during childhood to be one of the reasons for compulsive buying in adulthood (Rindfleisch et al., 1997; Moschis 2017; Baker et al., 2013b; Anwar et al., 2020).

H₂: Family resources will negatively affect compulsive buying tendency.

H_{2a}: Emotional family resources will negatively affect compulsive buying tendency.

H_{2b}: Financial family resources will negatively affect compulsive buying tendency.

Disruptive Family Events and Past Negative Time Perspective:

Research into the perception of time enunciated the importance of family, family structure (Sircova et al., 2014; Boniwell & Zimbardo, 2004) and attachment to parents (Akırmak, 2014). Past negative time perspective, which happens to be one of the five-time perspectives originally suggested by Zimbardo and Boyd (1999), has been reported to contain remorseful, painful and unpleasant memories, traumatic experiences, and unwanted situations belonging to the past (Sircova et al., 2014; Zimbardo & Boyd, 1999). Linked to disruptions in family history, past negative time perspective has been the subject of many studies. It has been reported that individuals with problematic relationships in their family history tend to focus on negative aspects of time (Zimbardo et al., 2017a). Similarly, past negative time perspective has been reported to be associated with inadequate support of family members and family conflict (Holman & Zimbardo, 2009).

H₃: Disruptive family events will positively affect past negative time perspective.

Past Negative Time Perspective and Compulsive Buying Tendency:

Since past negative time perspective is associated with psychological problems, including depression, unhappiness, mood disorders and low self-esteem (Anagnostopoulos & Griva 2012; Dunkel & Weber 2010), it has been claimed that individuals who remember the past with regret and pain were more prone to compulsive buying. The proof of this claim can be found in several studies in which the past negative time perspective is positively related to compulsive buying (Unger et al., 2018; Aksoy et al., 2022).

H₄: Past negative time perspective will positively affect compulsive buying tendency.

The Moderating Effect of Age on the Relation Between Disruptive Family Events and Past Negative Time Perspective:

As we mentioned previously, age was one factor affecting both the perception of time and the influence of family disruptions (Berman, 1977; Freeman et al., 2004; Rohr et al., 2017; Carstensen, 1995). We expect that as people age, despite being through so much in the past, they tend to remember the past fondly. Consistent with our expectations, Comblain and his colleagues (2005) found that compared to young adults, elders exhibit more positive attitudes towards negative events that happened in the past. A similar comparison can be found in Mather and Carstensen (2005)'s study, in which they reported that elders were more prone to recall happy memories than sad ones. Schulz (1982) has also noted that positive reactions can replace negative reactions given to a situation in the past as time passes.

H₅: Age will weaken the relationship between disruptive family events and past negative time perspective

The research model developed in line with the hypothesis is displayed in Figure 1.

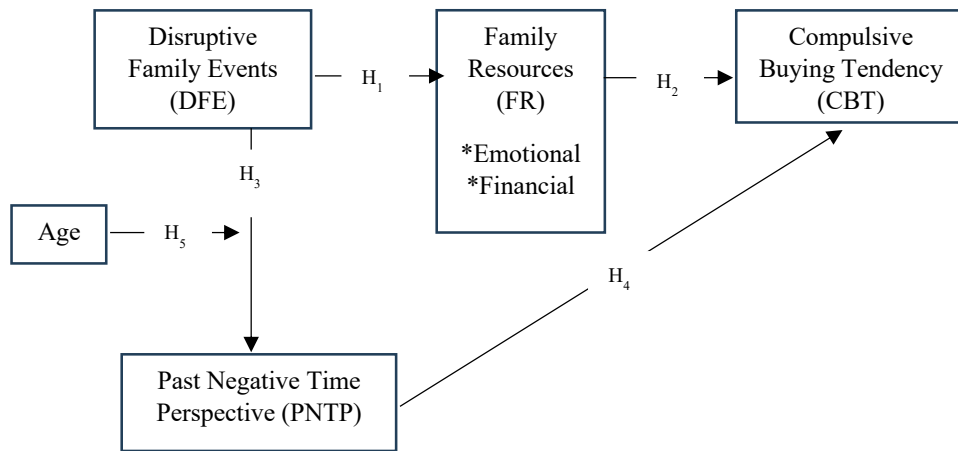


Figure 1: Research Model

4. Methodology

4.1. Measures

Disruptive Family Events:

Disruptive family events were measured by using seven events gathered from different studies. Two items were chosen from the Life Experience Survey developed by Sarason and his colleagues (1978). Although their study covers a variety of changes from pregnancy to school-related issues, It is essential to mention that not every item was related to family disruption. Hence, we decided to

use two items that bring changes in family dynamics. Other items were selected on the basis of both compulsive buying and family disruption literature (Baker et al., 2013a; Andersson, 2002; Barnes & Olson 1985; Neves & Casimiro 2018; Le Grange et al., 1992; Fiscella & Campbell, 1999; Settersten Jr. 2007). Two of the most common approaches for selecting disruptive family events are the use of each event separately or choosing several items from the list. The main disadvantage of the first method is that it does not cover many of the widely observed disruptions in family life, since it only focuses on one particular event. Hence, we adopted the second method. Please see Appendix for the list of disruptive family events used in this study. Participants were asked which disruptive events were experienced in their family before turning 18 and how these disruptions affected them. The ratings were made on a 7-point Likert scale ranging from 1 (extremely negative) to 7 (extremely positive). Additionally, another option (0=not happened) was added in case the disruption(s) never happened.

Family Resources:

Family resources were measured by asking participants to evaluate the degree of sufficiency of eight resources provided by their family members from birth up to 18 years old. Family resources were obtained from the 'Family Resources Scale' developed by Rindfleisch and his colleagues (1997). A 7-point Likert scale ranging from 1 (very insufficient) to 7 (very sufficient) was used to rate the sufficiency of resources.

Past Negative Time Perspective:

To measure past negative time perspective, the Turkish version (Akırmak, 2019) of 'Zimbardo Time Perspective Inventory' (Zimbardo & Boyd, 1999) was used. For the purpose of this study, only the past negative dimension of the inventory, which originally had five perspectives, was used. The decision to use only past negative time perspective was based on the content of the items, which is about painful and remorseful memories about family. Participants were asked to rate whether the items reflect their character or are appropriate for them on a 7-point Likert scale ranging from 1 (very untrue of me) to 7 (very true of me).

Compulsive Buying Tendency:

The literature on compulsive buying behavior has shown that the estimated prevalence of compulsive buyers in the general adult population is significantly low. Black (2007) calculated it to be 5.8%, while Black and his colleagues (1998) estimated it to be between 2% and 8% of the population. Therefore, we thought it would be more appropriate to measure the tendency rather than behavior and post-behavior. A subfactor (Tendency to Spend) of the 'Compulsive Buying Scale' originally developed by Edwards (1993) was used to measure participants' compulsive buying tendencies. The scale was selected based on the knowledge that it better explains consumers who use compulsive buying to deal with problems (Manolis & Roberts, 2008). The scale consists of 5 items. The items in the scale were translated into Turkish and back-translated by an academic and a teacher in the field of English teaching in order to ensure accuracy. Participants were asked to rate the degree of their

agreement with the items. The ratings were made on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

4.2. Participants

The pilot study was conducted on November 2021 with a total of 53 participants to evaluate the main study's feasibility and adequacy. We evaluated several options about the reasonable minimum number of representatives for the pilot study. In some studies in which required participants for the pilot study were examined, the authors reported similar ranges. For instance, Johanson and Brooks (2010, p.399) recommended a minimum of 30 representatives. Hill (1998) reported that for the Internet surveys, sufficient sample size for the plot study is 10 to 30. Similarly, Hertzog (2008, p.190) pointed out a minimum of 25 participants while the preferable range was 35-40.

Prior to conducting the main questionnaire, ethical approval was sought from Marmara University on February 2022. The data were gathered using an online survey prepared via Google Docs. Before starting the survey, participants received an explanation regarding the study and were asked for their consent to participate. The criteria of being aged 18 or above for selecting the subjects were clearly explained. The process of gathering main data started on April 2022 and ended on November 2022.

To determine the sample size for the main study, we used the approach of 10 times the number of each item (Costello & Osborne, 2005). Thus, the minimum sample size was calculated as 300 since 30 items (disruptive family events 7 items, family resources 8 items, past negative time perspective 10 items, and compulsive buying tendency 5 items) were multiplied by 10. The initial sample consisted of 667 participants. Seven questionnaires were excluded from the study based on repeated answers from the same subject due to a system error. Hence, as shown in Table 1, the data that will be analysed in this study come from 660 subjects, the majority of whom are female (61.97%), single (68.03%), and have a bachelor's degree (64.09%). All participants were between 18 and 70 years old (mean age $\cong$ 30 years).

Table 1. Descriptive characteristics of participant samples

		Frequency	Percentage
Gender	Woman	409	61.97%
	Man	251	38.03%
Marital Status	Married	211	31.97%
	Single	449	68.03%
Education Level	No formal education	3	0.45%
	Primary school	21	3.18%
	Secondary school	144	21.82%
	Bachelor's degree	423	64.09%
	Master's degree	57	8.64%
	PhD	12	1.82%
Age	$\cong$ 30 (between 18-70)		

4.2. Findings

IBM SPSS Statistics, version 25.0, was used to test the hypothesis formed for this study. As we mentioned in the previous section, participants were asked to rate disruptive family events ranging from 1 (extremely negative) to 7 (extremely positive) and 0 (not happened). Before analysing the data, disruptive family events were recoded as - 3, - 2, - 1 (instead of 1, 2, 3 respectively) for negative effect and +1, +2, +3 (instead of 5, 6, 7 respectively) for a positive effect. Since some events were based on the Life Experience Survey developed by Sarason and his colleagues (1978), we used their calculation method by creating a total change score. For each participant, seven disruptive events were calculated to divide participants into two groups: those who were affected negatively due to the disruptions and those who were affected positively. 4 (neither positive nor negative) and 0 (not happened) was recoded as the neutral element. When dividing, the mean score (-3,32) was used. The score between (-21) and (-4) refers to the participants (a total of 315) who were negatively affected, and the score between (-3) and (+21) refers to the participants (a total of 345) who were positively affected. Some studies on family disruption used a similar method for dividing the sample into two groups according to the mean score (e.g., Garasky et al., 2009).

Statistical significance between all variables was analysed using regression analysis, and reliability was calculated using Cronbach's alpha. Exploratory factor analysis was performed to identify subfactors belonging to the variables. Factor analysis indicated two subfactors for family resources (emotional and financial) that the original scale consisted of and only one factor for other variables. Although the total variance explained is accepted to be higher than 0.60 (Hair et al., 2019: 152), as can be seen in Table 2, the total variance of the past negative time perspective turned out to be below the acceptable level (46.947%). This difference is well justified because the 'Time Perspective Inventory' developed by Zimbardo and Boyd (1999) and used in our study has shown similar results (36%). A comparative study could also be cited in support of this difference. After analysing different versions of the time perspective inventory, Perry and his colleagues (2020) reported low variance for all variations, much the same as reported in our study. The Cronbach Alpha values for all three factors exceed 0.80, which is considered excellent (Durmuş et al., 2018, pp. 79-80). Additionally, the P-values are below 0.05, meeting the necessary threshold. The factor loadings for all items are above 0.50, which is regarded as an acceptable level. The KMO values for all factors and sub-factors are also above the acceptable level of 0.70 (Hair et al., 2019, p. 123). We can confirm that the results of the exploratory factor analysis meet all the mentioned criteria. Specifically, the factor loadings of Compulsive Buying Tendency and Financial Family Resources, which are above 0.80, indicate a strong correlation between the variables and the underlying factor, demonstrating that the factor strongly influences the variable.

Table 2. Exploratory factor analysis of family resources, compulsive buying tendency and past negative time perspective

Dimensions	Item	Factor Loadings	Cronbach's Alpha	KMO	Barlett (P)	Variance	
Past Negative Time Perspective	PNTP9	0.820	0.871	0.905	0.000	46.947	
	PNTP7	0.799					
	PNTP3	0.781					
	PNTP8	0.747					
	PNTP10	0.668					
	PNTP5	0.660					
	PNTP4	0.637					
	PNTP2	0.587					
	PNTP1	0.567					
	PNTP6	0.511					
Family Resources	FR8	0.863	0.870	0.881	0.000	70.578	
	FR7	0.832					
	Emotional	FR6					0.818
	FR4	0.734					
	FR5	0.634					
	Financial	FR3		0.821			
		FR1		0.818			
		FR2		0.817			
Compulsive Buying Tendency	CBT3	0.863	0.894	0.863	0.000	70.319	
	CBT1	0.841					
	CBT4	0.835					
	CBT2	0.831					
	CBT5	0.822					

Following the exploratory factor analysis, we performed a normality test to determine whether the data followed a normal distribution. As shown in Table 3, all variables fall within the reference range for normal distribution, which is between – 1 and +1 (Hair et al., 2019, p.48).

Table 3. Results for the normality test

	Skewness	Kurtosis
Past Negative Time Perspective	-0.630	-0.553
Family Resources (Emotional)	-0.467	-0.386
Family Resources (Financial)	-0.546	-0.025
Compulsive Buying Tendency	0.791	-0.220

4.3. Hypothesis Testing

Disruptive Family Events and Family Resources:

Regression analysis was performed in order to assess the effects of disruptive family events on family resources. The relationship between disruptive family events and emotional and financial family resources was significant for the negatively affected group ($\beta = -0.210$ and -0.152 $p < 0.05$). This finding indicates a decline in resources provided to the child if the effect of disruption is negative. This finding behaved exactly as hypothesised in H_1 and was consistent with past studies (Furstenberg Jr. & Teitler, 1994; Baker et al., 2013a; Umberson, 2006; Grougiou & Moschis, 2015; McLeod & Almazan, 2003; Kiernan, 1992; Thomson et al., 1994). For the group positively affected, no significant interaction were obtained for financial resources ($p > 0.05$). However, unexpectedly, a negative correlation was found between disruptive family events and emotional resources ($\beta = -0.122$ $p < 0.05$). Thus, H_1 , H_{1a} and H_{1b} are partially supported. This finding indicates that even though disruptions had not negatively affected the children, they still caused a decrease in their emotional resources. This unexpected result is congruent with the findings of some studies showing that disruptions' effects may not be permanent and may change with time (Wallerstein, 1991; Sun & Li, 2002). In addition, further examination concerning mean scores of family resources showed no major differences between the two groups. This follow-up analysis suggests that, in terms of resources, participants' needs were met to some extent.

Family Resources and Compulsive Buying Tendency:

Regression analysis was carried out to determine whether the decline in family resources affects compulsive buying tendencies. The result shows that a decrease in emotional resources yields an increase in compulsive buying tendency for the negatively affected group ($\beta = -0.187$ $p < 0.05$). Some studies have reported similar findings (Rindfleisch et al., 1997; Moschis, 2017). Contrary to our hypothesis, an exact opposite result was obtained for financial resources ($\beta = 0.188$ $p < 0.05$). This finding indicates that an increase in financial resources causes compulsive buying tendencies. It is necessary to point out that Baker and his colleagues (2013a) have also reported similar results. For the positively affected group, the analysis revealed no significant relationships ($p > 0.05$). Thus, H_2 , H_{2a} and H_{2b} are also partially supported.

Disruptive Family Events and Past Negative Time Perspective:

Regression analysis run to determine whether negatively affected participants are prone to past negative time perspective supports our claim ($\beta = 0.227$ $p < 0.05$). Furthermore, our findings indicate that if the disruption effect is positive, participants are unlikely to have past negative time perspectives ($\beta = -0.275$ $p < 0.05$). Thus, H_3 is completely supported. Although Maison (2018) has noted that past time perspective can be shaped irrespective of real experiences belonging to the past, our findings show a connection between experiences and time perspective. These findings are similar to those obtained from other studies (Holman & Zimbardo, 2009; Laghi et al., 2008).

Past Negative Time Perspective and Compulsive Buying Tendency:

Regression analysis to assess the relationship between past negative time perspective and compulsive buying tendency reveals a significant relationship for both groups (negatively affected $\beta = 0.230$ $p < 0.05$ – positively affected $\beta = 0.219$ $p < 0.05$). Thus, H_4 is completely supported. Similar to previous findings (Unger et al., 2018; Aksoy et al., 2022; Leonard et al., 2019), our findings indicate that those who recall the past with regret and pain have a high tendency for compulsive buying.

The Moderating Effect of Age on the Relation Between Disruptive Family Events and Past Negative Time Perspective:

As we mentioned, recalling past events with a more positive attitude was a part of the ageing process. As time goes by, fond memories take place of the painful ones. Following this information and before analysing the moderating effect, we found it necessary to conduct a regression analysis to understand better the link between age and past negative time perspective. The result of the analysis behaved exactly as we expected and revealed a significant relationship between these two variables ($\beta = -0.161$ $p = 0.00$ $R^2 = 0.25$). Our results suggest that people are unlikely to have past negative time perspectives as they get older. This finding provides consistent support for existing literature. Following this result, another regression analysis was performed to determine whether the age of participants (moderator variable) affects the relationship between disruptive family events (independent variable) and past negative time perspective (dependent variable). As seen in Table 5, contrary to our hypothesis, no significant interaction was obtained for the moderating effect. Thus, H_5 is not supported. This result suggests that for both groups, the effect of disruptive family events on past negative time perspectives is not moderated by the age of participants.

Table 4. The results of regression analyses for H_1 , H_2 , H_3 and H_4

Hyp.	Independent V.	Dependent V.	Negatively Affected						Positively Affected						Hypothesis
			β	p	R ²	F	t	β	p	R ²	F	t			
H ₁	DFE	FR												Partially Supported	
H _{1a}	DFE	FR (emotional)	-0.210	0.000	0.041	14.373	27.893	-0.122	0.024	0.012	5.166	71.933		Partially Supported	
H _{1b}	DFE	FR (financial)	-0.152	0.007	0.020	7.390	31.346	-0.092	0.087	0.006	2.941	72.845		Partially Supported	
H ₂	FR	CBT												Partially Supported	
H _{2a}	FR (emotional)	CBT	-0.187	0.006				-0.033	0.630					Partially Supported	
H _{2b}	FR (financial)	CBT	0.188	0.005	0.025	4.982	7.190	0.093	0.170	0.000	1.043	6.162		Partially Supported	
H ₃	DFE	PNTTP	0.227	0.000	0.048	16.933	21.782	-0.275	0.000	0.073	28.006	60.449		Supported	
H ₄	PNTTP	CBT	0.230	0.000	0.050	17.539	5.303	0.219	0.000	0.045	17.241	5.826		Supported	

Hyp= Hypothesis β = Standardized coefficients Beta (the strength of independent variable on the dependent variable) p= Statistical significance level R^2 = Adjusted R square (fitness of the regression model) F= Ratio of two variances (explained vs unexplained) t= Constant (ratio of estimated coefficient and its standard error)

Table 5. The result of regression analysis for H₅ (moderating effect of age on the relation between disruptive family events and past negative time perspective)

	Negatively Affected				Positively Affected			
	F	p	Interaction Term (p)	β	F	p	Interaction Term (p)	β
Model 1	13.902	0.000	0.898	0.009	22.447	0.000	0.663	0.031
Model 2	9244	0.000			14.992	0.000		

5. Discussion and Conclusion

Much has been written about the factors leading to compulsive buying. Despite these various factors, what causes compulsive buying more is still debatable. In this study, with the theories of life course and escape as a framework, we attempted to address this issue by comparing disruptive family events causing deprivation during childhood to negative recollections of these events experienced during adulthood.

Our findings indicate a significant distinction between experiences at a given time and memories that are recalled after years. After various analyses, it can be concluded that memories play a more important role in compulsive buying tendencies than actual events. This finding reminds us of Zimbardo and his colleagues' (2017) notion about the importance of memories over reality.

Another comparison of this study addresses the fundamental question of which type of deprivation experienced during childhood has a more prominent role in compulsive buying tendencies. An important finding of our study indicated the importance of emotions over material possessions. Similar findings have been obtained in family literature, where researchers have put more emphasis on emotional support than financial support (Alwin, 2001; Gillies et al., 2003; Offer & Fischer, 2018; Woody & Hutchison, 2019). Compared to inadequate financial support, lack of emotional support from family members triggered compulsive buying tendencies more.

As we mentioned before, researchers studying the negative effects of family disruptions reported decline in resources (Kiernan, 1992; Furstenberg Jr. & Teitler, 1994; Thomson et al., 1994; McLeod & Almazan 2003; Umberson, 2006; Baker et al., 2013a; Grougiou & Moschis, 2015). Although previous research led us to expect that family disruptions negatively affect children, we now know that not all disruptions are considered to be negative. Despite this consideration, observing declines in family resources in both situations may come as a surprise. However, contrary to widespread belief in a permanent effect starting at the moment of disruption, it is now known that people's reactions to a situation may change over time (Sun & Li, 2002; Wallerstein, 1991). It thus becomes essential to understand that despite experiencing positive effects due to a disruption, a negative outcome in terms of a decline in familial support may happen.

Taken together, these results suggests that family plays an important role in shaping individuals' consumption habits. Any disruption in family structure may affect its members not only at the moment of disruption but also for many years to follow. About compulsive buying, memories are more powerful than experiences at a specific time. In general, our results indicate that time may soften the impact of painful experiences. However, memories' influence remains important in shaping individuals' consumption choices. Our most prominent conclusion reminded us a quote from Zimbardo and his colleagues (2017a: 22):

"The way you remember the past can have a huge impact on the way you live today. And the way you remember the past is more important than what actually happened."

5.1. Future Research

Since we found that despite family disruptions children's needs were met to some extent, more information on how these needs were fulfilled would help us to understand family dynamics more accurately. In this context, it is important to know relatives' (especially grandparents) involvement in contributing to children's needs. Moreover, in some cultures and families, children are thought to be grateful for what they have, even if they live in poverty. Thus, the impact of differences in religion, upbringing and, personality traits on family resources should also be taken into consideration for future research. We know that individuals may have different perceptions of the same event. For that reason, religion, upbringing and, personality traits could also be used in explaining the difference in perception of disruptive family events.

5.2. Implications

The results of this study have significant implications for understanding how disruptive past experiences and painful childhood memories might have permanent effects in the following years. Comparing reality (disruptive family events) and memories (past negative time perspective) to understand the roots of compulsive buying tendency, we attempted to offer a broader perspective on the existing literature. While previous research has mainly focused on actual events, our findings show that memories play a more important role in understanding compulsive buying tendencies. This comparative approach helped us to provide insights not only for theorists but also for practitioners. Our study showed the importance of family, memories, and emotional deprivation in compulsive buying. Thus, managers need to consider these factors when deciding on strategies to understand and gain consumers.

Ethical and Data Statement

The Ethics Committee Approval Certificate with the number of 2022-1/6 has been taken on 04/02/2022 from the Ethics Committee of Marmara University.

The raw data and SPSS results of this study are available on request from the first author (ayse.karayilan@gmail.com)

References

- Adams, C. M. (2006). The Consequences of Witnessing Family Violence on Children and Implications for Family Counselors, *The Family Journal: Counseling and Therapy for Couples and Families*, 14(4), 334–341, <https://doi.org/10.1177/106.648.0706290342>
- Ainsworth, M. D. S., Bell, S. M. V. & Stayton, D. J. (1969). *Individual Differences in Strange-Situational Behaviour of One-Year-Olds*, The Johns Hopkins University.
- Akırmak, U. (2014). How is Time Perspective Related to Perceptions of Self and of Interpersonal Relationships?, *Spanish Journal of Psychology*, 17(92), 1–11, <https://doi.org/10.1017/sjp.2014.92>
- Akırmak, U. (2019). The Validity and Reliability of the Zimbardo Time Perspective Inventory in a Turkish Sample, *Current Psychology*, 40, <https://doi.org/10.1007/s12144.019.0153-3>
- Aksoy, B., Akpınar, A., & Özkara, B. Y. (2022). The Impact of Neuroticism on Compulsive Buying Behavior: The Mediating Role of the Past-Negative Time Perspective and the Moderating Role of the Consumer's Need for Uniqueness, *Journal of Marketing Theory and Practice*, 1-16, <https://doi.org/10.1080/10696.679.2022.2076247>
- Alwin, D. F. (2001). Parantel Values, Beliefs, and Behavior: A Review and Promulga for Research into the New Century, *Children at the Millennium: Where Have We Come From, Where are We Going?*, (6), (Ed. S. L. Hofferth & T. J. Owens), Elsevier Science Ltd: 97-139, ISBN: 0-7623-0776-5.
- An, C. B., Haveman, R., & Wolfe, B. (1993). Teen Out-of-Wedlock Births and Welfare Receipt: The Role of Childhood Events and Economic Circumstances, *The Review of Economics and Statistics*, 75(2), 195-208, <https://doi.org/10.2307/2109424>
- Anagnostopoulos, F., & Griva, F. (2012). Exploring Time Perspective in Greek Young Adults: Validation of the Zimbardo Time Perspective Inventory and Relationships with Mental Health Indicators, *Social Indicators Research*, 106(1), 41–59, <https://doi.org/10.1007/s11205.011.9792-y>
- Andersson, G. (2002). Children's Experience of Family Disruption and Family Formation: Evidence From 16 FFS Countries, *Demographic Research*, (7), 343-364, <https://doi.org/10.4054/DemRes.2002.7.7>
- Anwar, A., Anwar, M., Gul, H., & Siraj, R. (2020). Oniomania: Vulnerability Factors for Pathological Buying Behavior, *Pakistan Journal of Society, Education and Language*, 6(2), 289-299.
- Aquino, T., Brand, J. E., & Torche, F. (2022). Unequal effects of disruptive events. *Sociology Compass*, 16(4), e12972, <https://doi.org/10.1111/soc4.12972>
- Aries, P. (1962). *Centuries of Childhood: A Social History of Family Life*, (R. Baldick, Trans.), Jonathan Cape Ltd.
- Arstila, V. & Lloyd, D. (2014). Subjective Time: From Past to Future, Subjective Time: The Philosophy, Psychology, and Neuroscience of Temporality. (Ed. V. Arstila, & D. Lloyd), The MIT Press: 309-321, ISBN: 978-0-262-01994-1.
- Baker, A., Mathur, A., Fatt, C. K., Moschis, G. P. & Rigdon, E. E. (2013b). Using the Life Course Paradigm to Explain Mechanisms that Link Family Disruptions to Compulsive Buying, *Journal of Consumer Affairs*, 47(2), 263-288, <https://doi.org/10.1111/joca.12008>
- Baker, A. M., Moschis, G. P., Benmoyal-Bouzaglo, S. & Pizzutti dos Santos, C. (2013a). How Family Resources Affect Materialism and Compulsive Buying: A Cross-Country Life Course Perspective, *Cross-Cultural Research*, 47(4): 335-362, <https://doi.org/10.1177/106.939.7112473074>
- Barnes, H. L., & Olson, D. H. (1985). Parent-Adolescent Communication and the Circumplex Model, *Child Development*, 56(2), 438-447, <https://doi.org/10.2307/1129732>

- Barranti, C. C. R. (1985). The Grandparent/Grandchild Relationship: Family Resource in an Era of Voluntary Bonds, *Family Relations*, 34(3), 343-352, <https://doi.org/10.2307/583572>
- Bengtson, V.L. & Allen, K.R. (2009). The Life Course Perspective Applied to Families over Time, *Sourcebook of Family Theories and Methods*, (Ed. P. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm & S. K. Steinmetz) Springer: Boston: 469-504, https://doi.org/10.1007/978-0-387-85764-0_19
- Benson, A. L. & Gengler, M. (2004). Treating Compulsive Buying, *Handbook of Addictive Disorders: A Practical Guide to Diagnosis and Treatment*, (Ed. R. H. Coombs), John Wiley & Sons, Inc: 451-491, ISBN: 0-471-23502-4.
- Berman, G. (1977). Family Disruption and its Effects, *Psychological Problems of the Child and his Family*, (Ed. P. D. Steinhauer, & Q. Rae-Grant), Macmillan of Canada:371-382, ISBN: 978-1-349-81464-0.
- Black, D. W. (2007). Compulsive Buying Disorder: A Review of the Evidence, *CNS Spectrums*, 12(2), 124-132, <https://doi.org/10.1017/s109.285.2900020630>.
- Black, D. W., Repertinger, S., Gaffney, G. R. & Gabel, J. (1998). Family History and Psychiatric Comorbidity in Persons with Compulsive Buying: Preliminary Findings, *American Journal of Psychiatry*, 155(7), 960-963, <https://doi.org/10.1176/ajp.155.7.960>
- Block, R., A. (1989). Experiencing and Remembering Time: Affordances, Context, and Cognition, *Time and Human Cognition: A Life-span Perspective*, (Ed. L. Iris, & D. Zakay), Elsevier Science Publishers B: 333-363, ISBN: O-444-87379-1.
- Boniwell, I., & Zimbardo, P. G. (2004). Balancing Time Perspective in Pursuit of Optimal Functioning, *Positive Psychology in Practice*, (Ed. P. A. Linley & S. Joseph), John Wiley & Sons, Inc: 165-178, ISBN 0-471-45906-2,
- Carstensen, L. L. (1995). Evidence for a Life-Span Theory of Socioemotional Selectivity, *Current Directions in Psychological Science*, 4(5), 151-156, <https://doi.org/10.1111/1467-8721.ep11512261>
- Charlesworth, L. W. (2019). Middle Childhood, Hutchison, E. D. (Ed.), *Dimensions of Human Behavior: The Changing Life Course* (6th edition), Sage Publications Inc: 369-370. ISBN: 978.154.4339344.
- Cherlin, A. J. (2010). *The Marriage-Go-Round: The State of Marriage and the Family in America Today*, New York: Vintage Books, eISBN: 978-0-307-77351-7.
- Comblain, C., D'Argembeau, A., & Van der Linden, M. (2005). Phenomenal Characteristics of Autobiographical Memories for Emotional and Neutral Events in Older and Younger Adults, *Experimental Aging Research*, 31(2), 173-189, <https://doi.org/10.1080/036.107.30590915010>.
- Costello, A. B., Osborne, J. (2005). Best Practices In Exploratory Factor Analysis: Four Recommendations for Getting the Most from Your Analysis, *Practical Assessment, Research, and Evaluation*, 10(7), <https://doi.org/10.7275/jyj1-4868>
- D'Alessio, M., Guarino, A., De Pascalis, V. & Zimbardo, P. G. (2003). Testing Zimbardo's Stanford Time Perspective Inventory (STPI)-Short Form, *Time & Society*, 12(2-3), 333-347, <https://doi.org/10.1177/0961463X030122010>
- David, J., Kim, H. S., Hodgins, D. C., Dawson, S. J., Tabri, N., Shead, N. W., & Keough, M. T. (2024). Emotional difficulties mediate the impact of adverse childhood experiences on compulsive buying-shopping problems, *Journal of Behavioral Addictions*, 12(2), <https://doi.org/10.1556/2006.2024.00056>
- Dittmar, H. (2004). Understanding and Diagnosing Compulsive Buying, *Handbook of Addictive Disorders: A Practical Guide to Diagnosis and Treatment*, (Ed. R. H. Coombs), John Wiley & Sons Inc: 411-450, ISBN: 0-471-23502-4.

- Dollahite, D. C. (1991). Family Resource Management and Family Stress Theories: Toward a Conceptual Integration, *Lifestyles: Family and Economic Issues*, 12(4), 361-377, <https://doi.org/10.1007/BF00986852>
- Doty, J. L., Mortimer, J. T. (2018). Trajectories of Mother-Child Relationships Across the Life Course: Links with Adult Well-Being, Alwin, D. F., Felmlee, D. H., Kreager, D. A. (Ed.), *Social Networks and the Life Course: Integrating the Development of Human Lives and Social Relational Networks* (2), Springer: 391-413. ISBN: 978-3-319-71544-5, https://doi.org/10.1007/978-3-319-71544-5_18
- Douglas, J. E., Ressler, R. K., Burgess, A. W. & Hartman, C. R. (1986). Criminal Profiling from Crime Scene Analysis, *Behavioral Sciences & the Law*, 4(4), 401-421, <https://doi.org/10.1002/bsl.237.004.0405>
- Droit-Volet, S. (2014). What Emotions Tell us About Time, Subjective time: The philosophy, Psychology, and Neuroscience of Temporality (Ed.V. Arstila, & D. Lloyd), The MIT Press: 477-506, ISBN: 978-0-262-01994-1.
- Dunkel, C. S., & Weber, J. L. (2010). Using Three Levels of Personality to Predict Time Perspective, *Current Psychology*, (29) 95-103, <https://doi.org/10.1007/s12144.010.9074-x>.
- Durmuş, B., Yurtkoru, E. S. & Çinko, M. (2018). *Sosyal Bilimlerde SPSS’le Veri Analizi*. (7th Ed.), İstanbul: Beta Yayıncılık. ISBN: 978-605-242-225-0
- Duvall, E. M. (1958). Implications for Education Through the Family Life Cycle, *Marriage and Family Living*, 20(4), 334-343, <https://doi.org/10.2307/348255>
- Edwards, E. A. (1993). Development of a New Scale for Measuring Compulsive Buying Behavior, *Financial Counseling and Planning*, 4(1), 67-85.
- Elster, J. (1999). Emotion and Addiction: Neurobiology, Culture, and Choice, *Addiction: Entries and Exits*, (Ed. J. Elster), New York, Russell Sage Foundation: 239-276, ISBN: 0-87154-235-8.
- Faber, R. J. & O’Guinn, T. C. (2008). Compulsive Buying: Review and Reflection, *Handbook of Consumer Psychology*, (Ed. C. P. Haugtvedt, P. M. Herr, F. R. Kardes), Taylor & Francis Group LLC: 1039-1056, ISBN-13: 978-0-8058-5603-3.
- Ferraro, J. M. (2004). Family Patterns, *Encyclopedia of Children and Childhood in History and Society*, (2), (Ed. P. S. Fass), Macmillan Reference USA, ISBN: 0-02-865716-0
- Fieulaine, N. & Apostolidis, T. (2015). Precariousness as a Time Horizon: How Poverty and Social Insecurity Shape Individuals’ Time Perspectives, *Time Perspective Theory; Review, Research and Application: Essays in Honor of Philip G. Zimbardo*, (Ed. M. Stolarski, N. Fieulaine, W. van Beek), Springer: 213-228, ISBN: 978-3-319-07368-2, https://doi.org/10.1007/978-3-319-07368-2_14
- Finkelhor, D. (1978). Psychological, Cultural and Family Factors in Incest and Family Sexual Abuse, *Journal of Marriage and Family Counseling*, 4(4), 41-49, <https://doi.org/10.1111/j.1752-0606.1978.tb00539.x>
- Fiscella, K., & Campbell, T. L. (1999). Association of Perceived Family Criticism with Health Behaviors, *The Journal of Family Practice*, 48(2), 128-134.
- Forehand, R., Wierson, M., Thomas, A. M., Armistead, L., Kempton, T. & Neighbors, B. (1991). The Role of Family Stressors and Parent Relationships on Adolescent Functioning, *Journal of the American Academy of Child & Adolescent Psychiatry*, 30(2), 316-322, <https://doi.org/10.1097/00004.583.199103000-00023>
- Freeman, R., Abel, D., Cowper-Smith, M., & Stein, L. (2004). Reconnecting Children with Absent Parents: A Model for Intervention, *Family Court Review*, 42(3), 439-459, <https://doi.org/10.1111/j.174-1617.2004.tb00662.x>
- Friese, S. (1992). *Compulsive-addictive buying behavior: exploring effects of childhood experiences and family types*, (Master thesis), Oregon State University.

- Fuller, J. A. & Warner, R. M. (2000). Family Stressors as Predictors of Codependency, *Genetic Social and General Psychology Monographs*, 126(1), 5-22.
- Furstenberg Jr, F. F., & Teitler, J. O. (1994). Reconsidering the Effects of Marital Disruption: What Happens to Children of Divorce in Early Adulthood?, *Journal of Family Issues*, 15(2), 173-190, <https://doi.org/10.1177/0192513X94015002002>
- Garasky, S., Stewart, S. D., Gundersen, C., Lohman, B. J. & Eisenmann, J. C. (2009). Family Stressors and Child Obesity, *Social Science Research*, 38(4), 755-766, <https://doi.org/10.1016/j.ssresearch.2009.06.002>
- Gillies, V., Holland, J., McCarthy, J. R. (2003). Past/Present/Future: Time and the Meaning of Change in the 'Family', Allan, G., Jones, G., British Sociological Association (Ed.), *Social Relations and the Life Course*, Palgrave Macmillan Ltd: 33-48. ISBN: 978-0-230-59823-2.
- Green, L. (2016). *Understanding the Life Course: Sociological and Psychological Perspectives*, Polity Press, ISBN-13: 978-0-7456-9796-3.
- Griffin, J., Tyrrell, I. & Winn, D. (2005). *Freedom From Addiction: The Secret Behind Successful Addiction Busting*, Human Givens Publishing Ltd., ISBN: 1-899398-46-5.
- Grougiou, V., & Moschis, G. P. (2015). Antecedents of Young Adults' Materialistic Values, *Journal of Consumer Behaviour*, 14(2), 115-126, <https://doi.org/10.1002/cb.1505>
- Hair, J. F. Jr., Black, W. C., Babin, B. J. & Anderson, R. E. (2019). *Multivariate Data Analysis*, (8th edition), Cengage Learning EMEA. ISBN: 978-1-4737-5654-0
- Hertzog, M. A. (2008). Considerations in determining sample size for pilot studies. *Research in Nursing & Health*, 31(2), 180–191. doi:10.1002/nur.20247
- Hill, R. (1958). Generic Features of Families Under Stress, *Social Casework*, 39(2-3), 139-150, <https://doi.org/10.1177/104.438.9458039002-318>
- Hill, R. (1998). What sample size is enough in internet survey research. *Interpersonal Computing and Technology: An electronic journal for the 21st century*, 6(3-4), 1-12.
- Hilton, J. L., Darley, J. M., & Fleming, J. H. (1989). Self-Fulfilling Prophecies and Self-Defeating Behavior, *Self-Defeating Behaviors: Experimental Research, Clinical Impressions, and Practical Implications*, (Ed. R. C. Curtis), The Plenum Series in Social/Clinical Psychology, Plenum Press: 41–65, e-ISBN-13: 978-1-4613-0783-9, <https://doi.org/10.1007/978-1-4613-0783-9>
- Holman, E. A. (2015). Time Perspective and Social Relations: A Stress and Coping Perspective, *Time Perspective Theory; Review, Research and Application: Essays in Honor of Philip G. Zimbardo*, (Ed. M. Stolarski, N. Fieulaine, & W. van Beek.), Springer: 419-436, ISBN: 978-3-319-07368-2, https://doi.org/10.1007/978-3-319-07368-2_27
- Holman, E. A. & Zimbardo, P. G. (2009). The Social Language of Time: The Time Perspective-Social Network Connection, *Basic and Applied Social Psychology*, 31(2), 136-147, <https://doi.org/10.1080/019.735.30902880415>
- Hoyer, W. D. & MacInnis, D. J. (2010). *Consumer Behavior*, 5th Ed., South-Western, ISBN-13: 978-0-547-07992-9.
- Johanson, G. A. & Brooks, G. P. (2010). Initial Scale Development: Sample Size for Pilot Studies, *Educational and Psychological Measurement*, 70(3) 394 –400, <https://doi.org/10.1177/001.316.4409355692>
- Kanai, R. (2014). Illusory Distortion of Subjective Time Perception, *Subjective Time: The Philosophy, Psychology, and Neuroscience of Temporality*, (Ed. V. Arstila, & D. Lloyd), The MIT Press: 343-354, ISBN: 978-0-262-01994-1.

- Kashani, J. H., Daniel, A. E., Dandoy, A. C. & Holcomb, W. R. (1992). Family Violence: Impact on Children, *Journal of the American Academy of Child and Adolescent Psychiatry*, 31(2), 181-189, <https://doi.org/10.1097/00004.583.199203000-00001>
- Kasser, T. (2002). *The High Price of Materialism*, The MIT Press, ISBN: 0-262-11268-X.
- Keough, K. A., Zimbardo, P. G. & Boyd, J. N. (1999). Who's Smoking, Drinking, and Using Drugs? Time Perspective as a Predictor of Substance Use, *Basic and Applied Social Psychology*, 21(2), 149-164, <https://doi.org/10.1207/S15324834BA210207>
- Kiernan, K. E. (1992). The Impact of Family Disruption in Childhood on Transitions Made in Young Adult Life, *Population Studies*, 46(2), 213-234, <https://doi.org/10.1080/003.247.2031000146206>.
- Laghi, F., D'Alessio, M., Pallini, S., & Baiocco, R. (2008). Attachment Representations and Time Perspective in Adolescence, *Social Indicators Research*, 90(2), 181-194, <https://doi.org/10.1007/s11205.008.9249-0>
- Le Grange, D., Eisler, I., Dare, C., & Hodes, M. (1992). Family Criticism and Self-Starvation: A Study of Expressed Emotion, *Journal of Family Therapy*, 14(2), 177-192, <https://doi.org/10.1046/j..1992.00451.x>
- Lejoyeux, M., Weinstein, A. (2010). Compulsive Buying, *The American Journal of Drug and Alcohol Abuse*, 36(5), 248-253. <https://doi.org/10.3109/00952.990.2010.493590>
- Leonard, S., Zhang, J. W., & Howell, R. (2019). Spending Well: How Time Perspectives Impact Consumer Values and Financial Decisions Among Middle-Aged Adults, *Research in Human Development*, 16(2), 135-155, <https://doi.org/10.1080/15427.609.2019.1670568>
- Loper, A. B., Whalen, M. & Will, J. (2015). Inside and Out: Family Life for Parents in Prison, Family Problems: Stress, Risk, and Resilience, (Ed. J. A. Ardititi), John Wiley & Sons Inc: 89-113, ISBN: 978.111.8348284.
- Magalhães, T., Taveira, F., Jardim, P., Santos, L., Matos, E. & Santos, A. (2009). Sexual Abuse of Children. A Comparative Study of Intra and Extra-Familial Cases, *Journal of Forensic and Legal Medicine*, 16(8), 455-459, <https://doi.org/10.1016/j.jflm.2009.05.007>
- Maison, D. (2018). What Shapes Spending Styles: Demographics, Income or Individual Psychological Traits?, *Journal of Insurance, Financial Markets and Consumer Protection*, 3(2), 3-26.
- Manolis, C., & Roberts, J. A. (2008). Compulsive Buying: Does It Matter How it's Measured?, *Journal of Economic Psychology*, 29(4), 555-576, <https://doi.org/10.1016/j.joep.2007.10.005>
- Mather, M., & Carstensen, L. L. (2005). Aging and Motivated Cognition: The Positivity Effect in Attention and Memory, *Trends in Cognitive Sciences*, 9(10), 496-502, <https://doi.org/10.1016/j.tics.2005.08.005>
- Mayall, B. (2013). *A History of the Sociology of Childhood*, Institute of Education Press, ISBN: 978-1-78277-040-4.
- McFarlane, A. H., Bellissimo, A. & Norman, G. R. (1995). Family Structure, Family Functioning and Adolescent Well-Being: The Transcendent Influence of Parental Style, *Journal of Child Psychology and Psychiatry*, 36(5), 847-864, <https://doi.org/10.1111/j.1469-7610.1995.tb01333.x>
- McLanahan, S. (1985). Family Structure and the Reproduction of Poverty, *American Journal of Sociology*, 90(4), 873-901, <https://doi.org/10.1086/228148>
- McLeod, J. D., & Almazan, E. P. (2003). Connections Between Childhood and Adulthood, Handbook of the Life Course, (Ed. J. T. Mortimer, M. J. Shanahan), Kluwer Academic/Plenum Publishers: New York: 391-411, ISBN: 0-306-48247-9.
- Mick, D. G. (1996). Are Studies of Dark Side Variables Confounded by Socially Desirable Responding? The Case of Materialism, *Journal of Consumer Research*, 23(2), 106-119, <https://doi.org/10.1086/209470>

- Milewski, N. (2007). First Child of Immigrant Workers and Their Descendants in West Germany: Interrelation of Events, Disruption, or Adaptation?, *Demographic Research*, (17), 859-896, <https://doi.org/10.4054/DemRes.2007.17.29>
- Moschis, G. P. (2007). Life Course Perspectives on Consumer Behavior, *Journal of the Academy of Marketing Science*, 35(2), 295-307, <https://doi.org/10.1007/s11747.007.0027-3>
- Moschis, G. P. (2017). Research Frontiers on the Dark Side of Consumer Behaviour: The Case of Materialism and Compulsive Buying, *Journal of Marketing Management*, 33(15-16), 1384-1401, <https://doi.org/10.1080/0267257X.2017.134.7341>
- Myers, S. M. & Myers, C. B. (2014). Family Structure and School-Based Parental Involvement: A Family Resource Perspective, *Journal of Family and Economic Issues*, 36(1), 114-131, <https://doi.org/10.1007/s10834.014.9409-0>
- Nakken C. (1996). *The Addictive Personality: Understanding the Addictive Process and Compulsive Behavior*, Hazelden Publishing, ISBN: 1-56838-129-8.
- Neves, B. B., & Casimiro, C. (2018). Connecting Families? An Introduction, Connecting Families?: Information & Communication Technologies, Generations, and the Life Course, (Ed. B. B. Neves, & C. Casimiro), Policy Press: 1-13, ISBN-13: 978.144.7339946, <https://doi.org/10.1332/policypress/978.144.7339946.003.0001>
- Newcomb, M. D., Huba, G. J. & Bentler, P. M. (1981). A Multidimensional Assessment of Stressful Life Events Among Adolescents: Derivation and Correlates, *Journal of Health and Social Behaviour*, 22(4), 400-415, <https://doi.org/10.2307/2136681>
- O'Guinn, T. C. & Faber, R. J. (1989). Compulsive Buying: A Phenomenological Exploration, *Journal of Consumer Research*, 16(2), 147-157, <https://doi.org/10.1086/209204>
- Offer, S., Fischer, C. S. (2018). Calling on Kin: The Place of Parents and Adult Children in Egocentric Networks, Alwin, D. F., Felmlee, D. F., Kreager, D. A. (Ed.), *Social Networks and the Life Course: Integrating the Development of Human Lives and Social Relational Networks* (2), Springer: 117-138. ISBN: 978-3-319-71544-5, https://doi.org/10.1007/978-3-319-71544-5_6
- Perry, J. L., Temple, E. C., Worrell, F. C., Zivkovic, U., Mello, Z. R., Musil, B., Cole, J. C., & McKay, M. T. (2020). Different Version, Similar Result? A Critical Analysis of the Multiplicity of Shortened Versions of the Zimbardo Time Perspective Inventory, *Sage Open*, 10(2), 1-15, <https://doi.org/10.1177/215.824.4020923351>.
- Poynter, D. (1989). Judging the Duration of Time Intervals: A Process of Remembering Segments of Experience, Time and Human Cognition: A Life-Span Perspective, (Ed. L. Iris, & D. Zakay), Elsevier Science Publishers B: 305-331, ISBN: O-444-87379-1.
- Ressler, R. K., Burgess, A. W. & Douglas, J. E. (1995). *Sexual Homicide: Patterns and Motives*, Lexington Books, ISBN: 0-02-874063-7.
- Rindfleisch, A., Burroughs, J. E. & Denton, F. (1997). Family Structure, Materialism, and Compulsive Consumption, *Journal of Consumer Research*, 23(4), 312-325, <https://doi.org/10.1086/209486>
- Rohr, M. K., John, D. T., Fung, H. H., & Lang, F. R. (2017). A Three-Component Model of Future Time Perspective Across Adulthood, *Psychology and Aging*, 32(7), 597-607, <https://doi.org/10.1037/pag0000191>
- Ryan, P. J. (2013). *Master-Servant Childhood: A History of the Idea of Childhood in Medieval English Culture*, Palgrave Macmillan, ISBN: 978-1-137-36479-1, <https://doi.org/10.1057/978.113.7364791>

- Sarason, I. G., Johnson, J. H., & Siegel, J. M. (1978). Assessing the Impact of Life Changes: Development of the Life Experiences Survey, *Journal of Consulting and Clinical Psychology*, 46(5), 932-946, <https://doi.org/10.1037/0022-006X.46.5.932>
- Schlosser, S., Black, D. W., Repertinger, S., Freet, D. (1994). Compulsive Buying: Demography, Phenomenology, and Comorbidity in 46 Subjects, *General Hospital Psychiatry*, 16(3), 205-212. [https://doi.org/10.1016/0163-8343\(94\)90103-1](https://doi.org/10.1016/0163-8343(94)90103-1)
- Schulz, R. (1982). Emotionality and Aging: A Theoretical and Empirical Analysis, *Journal of Gerontology*, 37(1), 42-51, <https://doi.org/10.1093/geronj/37.1.42>
- Settersten Jr., R. A. (2007). Social Relationship in the New Demographic Regime: Potentials and Risks, Reconsidered, Interpersonal relationship across the life course, Vol.12, (Ed. T. J. Owens, J. J. Suitor), Elsevier JAI Press: 3-28, ISBN:978-0-7623-1292-4
- Settersten, Jr., R. A. (2017). Propositions and Controversies in Life-Course Scholarship, Invitation to the Life Course: Toward new understandings of later life, (Ed. J. R. Settersten), Routledge: 15-45, ISBN-13: 978-0-89503-269-0.
- Settersten Jr., R. A. (2018). Nine Ways that Social Relationships Matter for the Life Course, Social Networks and the Life Course: Integrating the Development of Human Lives and Social Relational Networks, (2), (Ed. D. F. Alwin, D. H. Felmlee, D. A. Kreager), Springer: 27-40, ISBN: 978-3-319-71544-5, https://doi.org/10.1007/978-3-319-71544-5_2
- Sircova, A., Van De Vijver, F. J., Osin, E., Milfont, T. L., Fioulaine, N., Kışlalı-Erginbilgiç, A., ... Boyd, J. N. (2014). A Global Look at Time: A 24-Country Study of the Equivalence of the Zimbardo Time Perspective Inventory, *Sage Open*, 4(1), 1-12, <https://doi.org/10.1177/215.824.4013515686>
- Solomon, M. R. (2018). *Consumer Behavior: Buying, Having, and Being*, (12th edition, Global edition), Pearson. ISBN-13: 978-1-292-15310-0.
- Sorokin, P. (1928). *Contemporary Sociological Theories*, Harper's Social Science Series, Harper Brothers.
- Sorokin, P. (1970). *Social & Cultural Dynamics: A Study of Change in Major Systems of Art, Truth, Ethics, Law and Social Relationships*, Porter Sargent Publisher, ISBN: 0-87558-029-7.
- Spitz, R. A. (1949). The Role of Ecological Factors in Emotional Development in Infancy, *Child Development*, 20(3), 145-155, <https://doi.org/10.2307/1125870>
- Stern, S., Doolan, M., Staples, E., Szmukler, G. L. & Eisler, I. (1999). Disruption and Reconstruction: Narrative Insights into the Experience of Family Members Caring for a Relative Diagnosed with Serious Mental Illness, *Family Process*, 38(3), 353-369, <https://doi.org/10.1111/j.1545-5300.1999.00353.x>
- Sugarman, S. D. (1995). Financial Support of Children and the End of Welfare as we Know it, *Virginia Law Review*, (8), 2523-2573.
- Sun, Y., & Li, Y. (2002). Children's Well-Being During Parents' Marital Disruption Process: A Pooled Time-Series Analysis, *Journal of Marriage and Family*, 64(2), 472-488, <https://doi.org/10.1111/j.1741-3737.2002.00472.x>
- Taylor, M. J., Crowley, S. L. & White, K. R. (1993). Measuring Family Support and Resources: Psychometric Investigation of the FSS and FRS, *Annual Meeting of the National Council on Measurement in Education*, Atlanta.
- Therborn, G. (2004). *Between Sex and Power: Family in the World, 1900-2000*, Routledge, ISBN: 0-203-64329-1.
- Thomas, W. I. & Znaniecki, F. (1918). *The Polish Peasant in Europe and America: Monograph of an Immigrant Group*, (1), Primary-Group Organization, Boston: The Gorham Press.

- Thomson, E., Hanson, T. L., & McLanahan, S. S. (1994). Family Structure and Child Well-Being: Economic Resources vs. Parental Behaviors, *Social Forces*, 73(1), 221-242, <https://doi.org/10.1093/sf/73.1.221>
- Torche, F., Fletcher, J., & Brand, J. E. (2024). Disparate Effects of Disruptive Events on Children. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 10(1), 1-30, <https://doi.org/10.7758/RSF.2024.10.1.01>
- Turney, K. & Goodsell, R. (2018). Parental Incarceration and Children's Wellbeing, *The Future of Children*, 28(1), 147-164.
- Uhlenberg, P. & Mueller, M. (2003). Family Context and Individual Well-Being: Patterns and Mechanisms in Life Course Perspective, *Handbook of the Life Course*, (Ed. J. T. Mortimer & M. J. Shanahan), *Handbooks of Sociology and Social Research*, Kluwer Academic Publishers: 123-148, ISBN: 0-306-48247-9.
- Umberson, D. (2006). Parents, Adult Children, and Immortality, *Contexts Magazine*, 5(4), 48-53.
- Unger, A., Lyu, H., & Zimbardo, P. G. (2018). How Compulsive Buying is Influenced by Time Perspective – Cross-Cultural Evidence From Germany, Ukraine, and China, *International Journal of Mental Health and Addiction*, 16(3), 525-544, <https://doi.org/10.1007/s11469.018.9942-4>
- Valence, G., d' Astous, A. & Fortier, L. (1988). Compulsive Buying: Concept and Measurement, *Journal of Consumer Policy*, 11(4), 419-433, <https://doi.org/10.1007/bf00411854>
- Van Horn, M. L., Bellis, J. M. & Snyder, S. W. (2001). Family Resource Scale-Revised: Psychometrics and Validation of a Measure of Family Resources in a Sample of Low-Income Families, *Journal of Psychoeducational Assessment*, 19(1), 54-68, <https://doi.org/10.1177/073.428.290101900104>
- Wallerstein, J. S. (1991). The Long-Term Effects of Divorce on Children: A Review, *Journal of the American Academy of Child & Adolescent Psychiatry*, 30(3), 349-360, <https://doi.org/10.1097/00004.583.199105000-00001>
- Wellman, B. (2018). Foreword the Family Has Become a Network, Connecting Families?: Information & Communication Technologies, Generations, and the Life Course, (Ed. B. B. Neves, & C. Casimiro), Policy Press: xv-xxii, <https://doi.org/10.1332/policypress/978.144.7339946.001.0001>
- Wertlieb, D. (2006). Children Whose Parents Divorce: Life Trajectories and Turning Points, Gotlib, I. H., Wheaton, B. (Ed.), *Stress and Adversity Over the Life Course: Trajectories and Turning Points*, Cambridge University Press: 179-196. ISBN: 13 978-0-521-02971-1
- White, J. M., Martin, T. F. & Adamsons, K. (2019). *Family Theories: An Introduction*, 5th Ed., Sage Publications, ISBN: 978.150.6394909.
- Winnicott, D. W. (1995). *The Family and Individual Development*, Routledge, ISBN: 0-41-5-04325-5.
- Woody, D. J. & Hutchison, E. D. (2019). *Infancy and Toddlerhood, Dimensions of Human Behavior: The Changing Life Course*, 6th Ed., (Ed. E. D. Hutchison), Sage Publications Inc: 171-250, ISBN: 978.154.4339344.
- Zimbardo, P. G., Boyd, J. N. (1999). Putting Time in Perspective: A Valid, Reliable Individual-Differences Metric, *Journal of Personality and Social Psychology*, 77(6), 1271-1288. doi: 10.1037/0022-3514.77.6.1271
- Zimbardo, P. & Boyd, J. (2008). *The Time Paradox: The New Psychology of Time that will Change Your Life*, Free Press – Simon & Schuster, Inc., ISBN-13: 978-1-4165-7974-8.
- Zimbardo, P., Clements, N., & Leite, U. R. (2017a). Time Perspective and Financial Health: To Improve Financial Health, Traditional Financial Literacy Skills are not Sufficient. Understanding Your Time Perspective is Critical, *Time Perspective: Theory and Practice*, (Ed. A. Kostić, D. & Chadee), Palgrave Macmillan: 9-40, ISBN: 978-1-137-60191-9, <https://doi.org/10.1057/978-1-137-60191-9>
- Zimbardo, Z. M., McDermott, R. & Zimbardo, P. G. (2017b). A New Measure of the Expanded Present Time Perspective, *Time perspective: Theory and practice*, (Ed. A. Kostić, & D. Chadee), Palgrave Macmillan: 41-61, ISBN: 978-1-137-60191-9, <https://doi.org/10.1057/978-1-137-60191-9>

Appendix

Disruptive Family Events (1: extremely negative – 7: extremely positive)

1. The death of a close family member
2. A major, abrupt change in your family's financial status
3. Frequent of lengthy periods in which one or both parents were absent
4. Divorce or remarriage of parent(s)
5. Poor communication among family members
6. Being exposed to high criticism by family members
7. Parents' absence from home due to workload

Family Resources (1: very insufficient – 7: very sufficient)

1. Spending Money
2. Food
3. Clothing
4. Time and attention
5. Discipline
6. Life skills and instruction
7. Emotional support and love
8. Role modeling and guidance

Past Negative Time Perspective (1: very untrue of me – 7: very true of me)

1. I often think of what I should have done differently in my life
2. My decisions are mostly influenced by people and things around me.
3. Painful past experiences keep being replayed in my mind.
4. I've taken my share of abuse and rejection in the past.
5. I've made mistakes in the past that I wish I could undo.
6. Things rarely work out as I expected.
7. It's hard for me to forget unpleasant images of my youth.
8. Even when I am enjoying the present, I am drawn back to comparisons with similar past experiences.

9. I think about the bad things that have happened to me in the past

10. I think about the good things that I have missed out on in my life

Compulsive Buying Tendency (1: strongly disagree – 7: strongly agree)

1. I go on buying binges

2. I feel “high” when I go on a buying spree

3. I buy things even when I don’t need anything

4. I go on a buying binge when I’m upset, disappointed, depressed, or angry

5. I buy things I don’t need or won’t use