
CHOICE OVERLOAD AND THE QUARTERLIFE PHASE: DO HIGHER EDUCATED QUARTERLIFERS EXPERIENCE MORE STRESS?

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Abstract

The hypothesis that higher educated twenty-somethings experience more choice overload than lower educated twenty-somethings was tested. 146 participants, either in university or in community college, filled in questionnaires asserting their levels of choice overload. As expected, higher educated (WO) twenty-somethings reported more choice overload than lower (MBO) educated twenty-somethings. Correlations were also found between choice overload and peer-pressure, student's housing situation and whether or not students regarded themselves as adults. It was concluded that higher educated twenty-somethings indeed experience more choice overload compared to lower educated twenty-somethings.

Keywords: quarterlife; educational level; twenty-somethings; choice overload; stress; options

Recent findings tend to indicate that a new life phase is emerging between late adolescence and adulthood in Western societies. This developmental period has been called 'prolonged adolescence', 'emerging adulthood' (Arnett, 2000), and more recently, '*quarterlife*' (Atwood & Scholtz, 2008; Kramer & Launspach, 2012). In comparison with earlier generations,

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these 'quarterlifers' (aged 18 - 30) are confronted with more (life) choices and arguably more life stress. On average, they reach traditional markers of adulthood - marriage, becoming a parent, owning your own home - later in life (Arnett, 2000).

Research further demonstrates that for some quarterlifers this can be a tumultuous phase of their lives (Arnett, 2000); they report feeling insecure, feeling unable to live up to their own high expectations, or feeling anxious about their future. They often report being confronted by a state of "choice overload" - in which they feel coerced to make lots of important decisions, but they feel unable to do so. Some researchers even go as far as deeming this a 'quarterlife crisis' (Robbins & Wilner, 2001; Thorspecken, 2005).

In their oft-cited study, Iyengar and Lepper (2000) investigated the effect of having too much choice on consumer attitudes and consumer behaviour. In their experiment, shoppers in a convenience store were confronted with a choice of either a few (6) different choices of jam, or a lot (30) of different jams. Their results show that although shoppers found having a plethora of choices desirable, they were less likely to buy jams when confronted with too many choices. This is what Schwartz (2004) calls the paradox of choice: having too much choice seems desirable initially, but in fact results in making a choice more challenging.

Making difficult choices sometimes results in psychological stress, feelings of self-doubt, and occasionally even a personal crisis (Lestegas, 2003, Robbins & Wilner, 2001). This stress, brought about by making difficult choices, is called a state of *choice overload*. Earlier research seems to indicate that people between the ages of 18 and 25 are more often confronted by choice overload than people between the ages of 25 and 35 (Launspach, 2010). However, this study only includes higher-educated participants and thus is exclusively indicative of higher-educated young adults.

The current study aims to gauge choice overload among lower and higher educated twenty-somethings. In the Dutch educational system, all students attend elementary school between the ages of 4 and 12 years. Education is then further pursued in high school (*voortgezet onderwijs*) depending on their results. Pupils spend four (practically oriented VMBO-education) to six years (theoretically oriented VWO-education) in high school. After high school, students choose either one to four years of MBO (vocational training) or academic education. The latter is offered at either universities of

applied science (HBO) or research-oriented universities (WO). In this study we compare MBO-students (lower educated twenty-somethings) to WO-students (higher educated twenty-somethings).

Research seems to suggest that higher educated quarterlififers experience more difficulty when making important choices than lower educated twenty-somethings, as their choices are supposedly more difficult and they have more options to choose from (Wijnants, 2008). They seem to be more affected by choice overload than lower educated twenty-somethings, supposedly because their choices concerning their studies and their career are more fundamental and complex.

Objectives

In the present study, choice overload and other relevant factors among both higher educated quarterlififers (WO students) and lower educated quarterlififers (MBO students), were investigated in a case-control design. The following hypotheses were assessed: (1) Higher educated quarterlififers experience more choice overload than lower educated quarterlififers. (2) Associations between choice overload and certain other relevant factors were also investigated; factors such as gender, age, peer-pressure, whether they live at home or on their own, and whether or not they consider themselves an adult.

To examine these hypotheses we asked WO students as well as MBO-students to fill out questionnaires containing the *Choice Overload Questionnaire* (Launspach, 2010) and a subset of the *Thirty-somethings' Dilemmas Questionnaire* (Lestegas, 2003).

Method

Participants

A sample of 167 young adults was utilised to test these hypotheses. For an adequate power, the required number of participants was estimated to be 150, or 75 in each group. The sample consisted of Dutch students only. Questionnaires on paper were distributed at several educational institutions and students were invited to fill them out ($n=52$). The questionnaires were also distributed online ($n=94$) through Qualtrics.com. Participants were selected on

the basis of either pursuing higher (WO) or lower education (MBO). Students from universities of applied sciences (HBO) were not included in this study, with the intention of maintaining a higher contrast between the different groups of participants. Another inclusion criterion was the age of the participants; the participants had to be between 18 and 30 years old. Among these participants, 72 were MBO students and 74 were WO students. The mean age of the MBO group was 19,9 years ($SD=2.6$), and was 21.9 years ($SD=2.3$) for the WO group. Participants did not receive any rewards for participating in this study. The study has been approved by the Ethics Review Board of the University of Amsterdam.

Materials

Choice overload. Choice overload has been measured with *The Choice Overload Questionnaire* developed by Launspach (2010), consisting of nine items. The scale that accompanied each item consisted of six options, ranging from absolutely disagree (0) to absolutely agree (5). The responses were scored from 1 to 6; thus a minimum score of 9 points may be obtained, with a maximum score of 54 points. According to Launspach (2010) a Cronbach's alpha of .86 has been found for this questionnaire.

Peer pressure. Peer pressure has been operationalised by using a subset of the *Thirty-somethings' Dilemmas Questionnaire* created by Lestegas (2003). This subset consisted of seven items. The options for these questions varied from absolutely disagree (0) to absolutely agree (5) and were scored from 1 to 6 as well. This implies a minimum score of 7 to be obtained, and a maximum score of 42 points. For this subtest, a Cronbach's alpha of .78 has been found by Lestegas (2003).

Demographic Information. These items included questions about age, sex, relationship status, situation, religion, high school level and current level of education. Further, the participants could choose between several themes in which choice overload could be experienced, namely study, partner, job, housing and children. Participants were also provided with the opportunity to fill in other themes.

Procedure

The participants were requested to read the informational brochure carefully before attending to the questionnaire. The brochure provided

information concerning the goal of this study and, privacy information. It was made clear to the participants, that by filling out the questionnaire they agreed upon the terms of this study. In the questionnaire, both online and on paper, the participants were instructed to select the answer most applicable to themselves. The items from the choice overload and the peer pressure questionnaire were shown alternately. By doing so, we tried to reduce response bias.

Analysis

To test our expectation that WO students experienced more choice overload than MBO students, we executed a *t* test. Furthermore, correlations were calculated between choice overload, peer pressure, maturity, age and living situation. Finally, an explorative analysis was executed to examine whether the two groups experienced choice overload regarding different themes.

Results

From the sample of 167 participants, 10 participants were deleted from the data due to a lack of information regarding age. Eleven participants were excluded from this study on the basis of their education; these participants were HBO students, which do not meet criteria as either MBO- or WO-students. The number of participants after these exclusions was 146: 72 MBO- and 74, WO-students.

Furthermore, two of the participants failed to answer one question on the questionnaire. This has been compensated by computing the mean of the rest of the responses, given by that respective person. Descriptive data has been listed in Table 1.

Before executing the analysis, the distribution of the data has been checked. Differences between the two groups have been elucidated for the variables age, living situation, and gender. All of the aforementioned variables were checked with a chi-square test, except for the variable age. Differences in age were investigated by running a *t* test. The mean age of the participants in the MBO group was significantly lower than for the participants in the WO

group, $t(144)=4.89$, $p<.001$. The number of participants that did not live with their parents anymore was significantly higher for the WO group than for the MBO group, $X^2(1)=47.16$, $p<.001$. The ratio for both gender and relationship status did not differ significantly between the two groups.

Table 1. Descriptive Data for MBO (Lower Educated) versus WO (Higher Educated) Participants

Demographics	MBO	WO
Age	$M = 19.9, SD = 2.6$	$M = 21.9, SD = 2.3$
Housing situation (%)		
On their own	22 (30)	64 (87)
At parent's home	50 (70)	10 (14)
Gender (%)		
Male	26 (36)	18 (24)
Female	46 (64)	56 (76)
Relationship status (%)		
In a relationship	29 (40)	39 (53)
Single	43 (60)	35 (47)

The questionnaires that have been used for this study were tested for reliability. For the choice overload- and the peer pressure questionnaire, Cronbach's alpha has been computed. For the choice overload questionnaire this came down to $\alpha=.72$ for MBO students and $\alpha=.81$ for WO students. The peer pressure questionnaire showed a Cronbach's alfa of $\alpha=.65$ and $\alpha=.76$ for MBO and WO students respectively.

Before turning to our main analysis, the data have been checked for the assumption of normality, which has been tested with the Shapiro-Wilk test. Both groups met the criteria for normality.

For the variable choice overload, mean scores were calculated for all of the independent variables, see Table 2. To test our hypothesis that WO students experienced more choice overload than MBO students, a t test was performed. As predicted, WO students experienced significantly more choice overload than MBO students, $t(144)=1.095$, $p=.008$. The results were in line with the hypothesis.

Furthermore, the examination of the relation between choice overload and all the concerning variables was addressed. For the continuous variables peer pressure and age, we computed Spearman's r . For the dichotomous variables living situation, gender and relationship status, a t test was performed. For mean scores concerning the variable choice overload, see Table 2. A significant correlation was found between peer pressure and choice overload, $r(144)=.448, p<.001$. No significant correlation exists between age and choice overload. The subjects who lived at their parents' home differed significantly from those who lived on their own in experiencing choice overload, $t(144)=-2.280, p=.024$. Participants of both genders and both relationship statuses did not differ significantly from one another in experiencing choice overload.

Table 2. Mean scores for Choice Overload

	Mean choice overload (<i>SD</i>)
Education level	
MBO (lower educated)	32.42 (6.96)
WO (higher educated)	35.64 (7.52)
Living situation	
On their own	35.20 (7.69)
At parents' home	32.40 (6.68)
Gender	
Male	32.34 (6.86)
Female	34.78 (7.53)
Relationship status	
In a relationship	33.53 (7.70)
Single	34.50 (7.15)

Besides examining whether both groups differed in experiencing choice overload, we were interested in whether there was a distinction between the themes which obtained the highest response scores for each group. Participants were asked in the questionnaire to fill in which themes they experienced choice overload with. The themes that could be selected from were: *study*, *partner*, *job*, *housing* and *children*. The percentages for all of the themes are displayed in Table 3 and Figure 1.

Table 3. Differences in Choice Overload between MBO and WO (Lower and Higher Educated Respectively) Participants per Theme

Theme	MBO	WO
Study	56.9%	70.3%
Partner	26.4%	18.9%
Job	22.2%	43.2%
Housing	18.1%	14.9%
Children	9.7%	1.4%

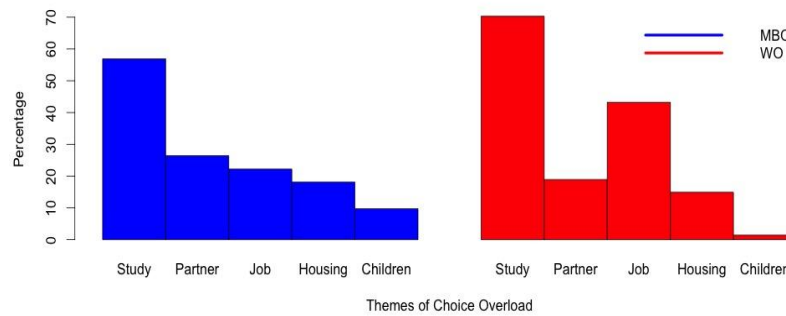


Figure 1. Percentages of Participants' Choice Overload per Theme for Lower Educated (MBO) and Higher Educated (WO) Participants

By means of this explorative analysis, it can be concluded that MBO students, compared to WO students, experienced more choice overload about the themes partner, housing and children. On the other hand, WO students scored higher on the themes study and job, compared to MBO students.

Conclusion

The degree of choice overload was compared between higher educated and lower educated twenty-somethings. Evidence was found for a positive association between education and choice overload. Higher educated quarterlififers generally experienced more choice overload than lower educated quarterlififers.

The difference between the groups was partly explained by living situation, sense of maturity and by peer-pressure. While the degree of choice

overload differed between groups, no difference was found in subjective reports of having too many choices available. Positive correlations were also found between choice overload and housing situation and between choice overload and peer pressure. The reported stressors also differed between groups; academically educated students were more often stressed about their studies and careers, while vocationally educated students were more often stressed about their choice of partner, their housing situation and whether or not to have children. The lower educated group reported less choice overload than the higher educated group. Nevertheless they also reported a significant degree of choice overload.

A noteworthy finding in this study was the difference in the sense of maturity between higher and lower educated students. Contrary to what was expected, the lower educated participants felt more mature than the higher educated, while the lower educated participants were generally younger. This contradiction could be explained by the difference in career advancement between the higher and lower educated. Secondary schools in the Netherlands for lower educated students are of shorter duration, compared to academic students. For this reason they generally start the next step in their education earlier in their lives. They are likely to be concerned with their future after their education as well. This might be the reason that they feel more mature earlier compared to academic students. The cause of the difference in the feeling of maturity, however, is not directly examined in this study.

A limitation of this study was that the lower educated students were on average two years younger than the highly educated students. Therefore, an alternative explanation for the results might be that academic students reported more choice simply because they were older and had more responsibilities. Further research should aim to find higher and lower educated quarterlifers of the same age to control for this.

In conclusion, current research has provided empirical support for a difference in stress experience between higher educated and lower educated twenty-somethings. Current research supports claims that higher educated twenty-somethings experience more choice overload than lower educated twenty-somethings. In addition to a difference in the degree of choice overload, a difference was also found in topics through which they were experiencing stress. What is clear however, is that choice overload poses a problem for quarterlifers - both the academically and vocationally educated. The present

study indicates that both higher and lower educated twenty-somethings experience their share of choice overload. It may be advisable to pay more attention to this underreported phenomenon, for example in universities.

References

- Atwood, J. D., & Scholtz, C. (2008). The quarterlife time-period: An age of indulgence, crisis or both? *Contemporary Family Therapy, 30*, 233-250. doi: 10.1007/s10591-008-9066-2
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychology, 55*, 469-480.
- Iyengar, S. S., & Lepper, M. R. (2000) When choice is demotivating: Can one desire too much of a good thing? *Journal of Personality and Social Psychology, 79*(6), 995-1006. doi: 10.1037/0022-3514.79.6.995
- Kramer, A., & Launspach, T. (2012) *Quarterlife: Kansen, keuzes en kopzorgen van de twintigers van nu*. Amsterdam: Bert Bakker.
- Launspach, T. (2010) *Keuzeverlamming: Een onderzoek naar quarterlifecrisis onder jong volwassenen, en haar samenhang met depressie* (Unpublished master's thesis). Department Psychology, University of Amsterdam.
- Lestegas, A. P. (2003). *Dertigers dilemma's: Waarheid of mythe?* (Unpublished master's thesis). Department Psychology, University of Amsterdam.
- Robbins, A., & Wilner, A. (2001). *Quarterlife crisis: The unique challenges of life in your twenties*. New York, NY: Jeremy P. Tarcher/Putnam.
- Schwartz, B. (2004). *The paradox of choice: Why more is less*. New York: Ecco.
- Thorspecken, J. M. (2005) *Quarterlife crisis: The unaddressed phenomenon*. Paper presented at the New Jersey Counseling Association, Eatontown, New Jersey.
- Wijnants, N. (2008). *Het dertigersdilemma*. Amsterdam: Bert Bakker.

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