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Quality of Life, Risk Behavior, and Digital Engagement

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ABSTRACT. This study examines the relationship between quality of life factors, risk-taking behaviors, and the perceived importance of mobile apps. Regression analysis revealed that quality of life factors explain 10.3% of the variance in risk-taking ($R^2 = 0.103$). Satisfaction with learning was negatively associated with risk-taking ($\beta = -0.56$, $p < .01$), while satisfaction with creativity ($\beta = 0.44$, $p < .05$) and friendships ($\beta = 0.41$, $p < .05$) showed positive associations. A second analysis found that quality of life factors explain 8.8% of the variance in app importance ($R^2 = 0.088$), with satisfaction with learning ($\beta = 0.11$, $p = 0.022$) and love ($\beta = 0.07$, $p = 0.014$) as significant predictors. These findings highlight how life satisfaction influences both risk-taking and digital engagement.

Keywords: Quality of Life, Risk-Taking, Apps importance

INTRODUCTION

Quality of life is a key factor in understanding human behavior, including risk-taking behavior (Dey et al., 2014; de Oliveira Pinheiro et al., 2022). The relationship between these factors is relevant in many areas such as health, finance or the use of technology. Previous research suggests that a low quality of life, characterized by low life satisfaction or poor mental state, may favor risk-taking behaviors as a coping mechanism (Khodarahimi & Fathi, 2016; Valois et al., 2002).

Studies suggest that a high quality of life is associated with reduced engagement in risky behaviors, while young people who use alcohol, tobacco or illicit drugs tend to report lower life satisfaction (Valois et al., 2002).

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Low satisfaction is also correlated not only with substance use, but also with other risky behaviors, such as involvement in physical violence or possession of a weapon (Esposito et al., 2020; Kuntsche et al., 2004; Topolski et el., 2001). On the other hand, a higher quality of life is associated with more prudent and better-valued choices, highlighting the importance of this aspect in understanding the psychology of decision-making. In addition to influencing offline choices and behaviors, life satisfaction also plays a key role in how individuals navigate the digital world. In the digital age, these issues are not only reflected in everyday decisions, but also in users' relationship with technology.

Thus, in the digital age, quality of life and risk-taking behaviors also have a direct impact on how users perceive the importance of digital applications. Applications are no longer just functional tools, but become an extension of user experiences and needs, influenced by psychological and behavioral factors (Atkinson & Castro, 2008; Berceanu et al., 2023; Damant et al., 2017; Triantafyllidis & Tsanas, 2019). Moreover, they have the capacity to support people by providing assistance and have the potential to improve quality of life across multiple dimensions (Elkefi et al., 2023; Zych et al., 2024).

As digital applications have evolved from mere functional tools to platforms integrated into everyday life, users' perception of their importance is strongly influenced by psychological factors (Chan & Honey, 2022; Li & Luximon, 2016). How individuals perceive their own quality of life and their propensity to take risks plays an important role in how they interact with technology and how they choose and use digital applications.

Individuals with a high quality of life can use apps in a balanced way and for a positive purpose in terms of personal evolution or health (Horwood & Anglim, 2019). In this sense, apps have the potential to become a way in which resources are optimized and lifestyle is improved (Chen & Li, 2017; Horwood & Anglim, 2019). However, it should be noted that overuse can have negative effects on well-being (David et al., 2018; Horwood & Anglim, 2019; Rotondi et al., 2017).

As digital applications are increasingly present in everyday life, it is important to understand how quality of life, risk-taking tendencies and the use of technology intersect. While these tools can play a positive role by providing useful support and resources, their effects depend on users' psychological and behavioral factors. Individuals with high levels of life satisfaction tend to use technology in a balanced and beneficial way, while those with lower levels of wellbeing may be more vulnerable to unhealthy uses. This dynamic highlights the need to explore how digital apps can be used to improve lifestyles and reduce the risks associated with overuse.

HYPOTHESES

Understanding the relationship between quality of life factors and risk-taking behaviors is important for predicting decisions in areas like health (Patrick & Erickson, 1993; Zafar et al., 2009), finances (Nofsinger et al., 2018), and technology (Yin et al., 2004).

We expect quality of life to be related to risk-taking behaviors through its influence on decision-making processes. Individuals experiencing lower quality of life, characterized by reduced life satisfaction or poor mental health, are more likely to engage in risk-taking behaviors as a coping mechanism (Khodarahimi & Fathi, 2016). In contrast, higher quality of life is associated with more cautious and deliberate choices (Topolski et al., 2001). This relationship is particularly relevant in understanding the perceived importance of digital applications that support decision-making and well-being.

We also propose that quality of life factors and risk-taking behaviors influence individuals' perceptions of the necessity and usefulness of applications. Prior research has shown that individuals with high self-confidence and a greater tendency for risk-taking are more likely to adopt new technologies and applications (Xu et al., 2016). Consequently, we expect that higher levels of risk-taking may be associated with a greater perceived importance of applications. Based on these, we put forward the following hypotheses:

H1. *There is a relationship between quality of life and risk-taking behaviors*
H2. *Quality of life factors and risk-taking behavior influence the perceived importance of apps for customers.*

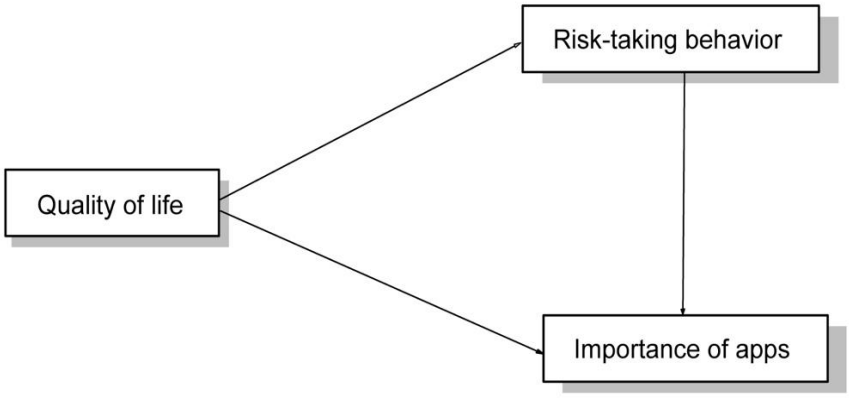

Figure 1. *Research conceptual model*

METHODOLOGY

Procedure

The study employed questionnaires created using Google Forms, with participation being entirely voluntary. Data collection was conducted by distributing the study link via social media platforms, email to targeted respondents, and through snowball sampling. Demographic information, such as gender and age, was recorded. Participants were provided with comprehensive information about the study's purpose, procedures, and instructions, and confidentiality of their responses was guaranteed.

Prior to completing the questionnaires, participants provided written informed consent (Form No. 94/08.12.2021). The finalized dataset was imported into Jamovi version 2.3.28. Descriptive statistics, including means, standard deviations, and percentages, were used to describe the demographic characteristics. Hypotheses were tested using linear regression analysis.

Instruments

Quality of life

In order to assess quality of life, we used QOLI® that measures life satisfaction, positive psychology, and mental health and is widely used in both clinical and nonclinical settings. It evaluates quality of life as the subjective difference between a person's desires and their reality, focusing on need satisfaction, goal achievement, and personal fulfillment. Questions such as "How important is learning for your happiness?" and "How satisfied are you with the learning in your life?", are adapted across various life areas. Validated for the Romanian population via Test Central, the QOLI® has strong internal reliability, with a Cronbach's α of 0.82 (M = 48.82, SD = 7.99).

Risk-taking

To evaluate risk-taking behavior, we utilized the Romanian version of the Risk-Taking Scale (Iliescu, Popa, & Dimache, 2015), a self-report instrument designed to measure individuals' propensity for engaging in risk-taking across various contexts. The scale comprises 10 items, rated on a 5-point Likert scale ranging from "Not at all true for me" to "Completely true for me." Example items include "Take risks" and "Am willing to try anything once." The scale generates a single composite score, with higher scores reflecting a greater inclination

toward risk-taking. Validated for the Romanian population, the scale demonstrates strong psychometric properties. For our sample, Cronbach's alpha was calculated at .82 (M = 2.44, SD = .75), indicating good internal consistency.

Importance of applications for customers

To assess the importance of applications for customers, we utilized a single-item measure: "How important is it for you that a store has online shopping applications?" Participants rated their responses on a 6-point Likert scale ranging from 1 ("Not important at all") to 6 ("Extremely important"). This item was specifically designed to capture the perceived significance of mobile applications in the shopping experience, reflecting the role of technology in consumer purchasing behavior.

Participants

The sample consisted of 331 respondents, all of whom submitted complete and valid responses, achieving a 100% response rate. Data for the study were gathered between March 2022 and December 2022. Participants were recruited through various channels, ensuring a diverse representation of the Romanian population. The sample included individuals from different age groups, genders and educational backgrounds, which helped to capture a broad spectrum of perspectives on digital behavior and consumer preferences.

Of the 331 respondents, a majority were female (82.2%, n = 272), while males accounted for 17.2% (n = 57), and a small proportion identified as “Other” (0.6%, n = 2). The age distribution was relatively balanced, with the largest groups being those aged 21–30 years (35.1%, n = 113) and less than 20 years (33.8%, n = 112). The remaining respondents were distributed across other age categories, with only a small number over 60 years of age (0.3%, n = 1). Regarding educational background, 61.9% (n = 205) of the participants had higher education, while 36.5% (n = 121) had lower education, and a small percentage (0.6%, n = 2) attended specialty courses.

RESULTS

H1. *There is a relationship between quality of life and risk-taking behaviors*

To test this hypothesis, we conducted a linear regression analysis with risk-taking as the dependent variable and quality of life factors as the independent variables. The model yielded an R^2 of 0.103, indicating that approximately 10.3% of the variance in risk-taking behaviors is explained by the quality of life factors included in the analysis. The results revealed significant relationships

between three specific quality of life factors and risk-taking behaviors: satisfaction with learning ($\beta = -0.56$, $p < .01$), satisfaction with creativity ($\beta = 0.44$, $p < .05$), and satisfaction with friends ($\beta = 0.41$, $p < .05$).

Satisfaction with learning demonstrated a negative and statistically significant relationship with risk-taking behaviors, suggesting that individuals who are less satisfied with their learning opportunities are more inclined to engage in risk-taking activities. This may reflect a compensatory mechanism where dissatisfaction in the learning domain leads individuals to seek stimulation or fulfillment in other, potentially riskier pursuits. Conversely, satisfaction with creativity showed a positive and significant association with risk-taking behaviors, indicating that those who feel fulfilled creatively are more likely to take risks, potentially as an expression of openness or exploration. Similarly, satisfaction with friendships was positively linked to risk-taking behaviors, suggesting that robust social relationships may foster a sense of security or encouragement that supports engaging in risk-taking activities. Considering these results, H1 was partially confirmed.

Table 1. *Results of the linear regression analysis for the relationship between quality of life factors and risk-taking*

			95% Confidence Interval			
Predictor	**Estimate**	**SE**	**Lower**	**Upper**	**t**	**p**
HEALTH	0.15	0.22	-0.27	0.57	0.69	0.49
SELF ESTEEM	0.20	0.18	-0.16	0.56	1.09	0.28
PURPOSE	0.40	0.21	-0.00	0.81	1.95	0.05
MONEY	0.01	0.21	-0.40	0.41	0.02	0.98
WORK	-0.05	0.16	-0.36	0.27	-0.28	0.78
PLAY	0.32	0.18	-0.03	0.67	1.82	0.07
LEARN	-0.56	0.21	-0.97	-0.15	-2.70	< .01**
CREATIVITY	0.44	0.19	0.08	0.80	2.39	< .05*
HELP	-0.12	0.18	-0.48	0.24	-0.66	0.51
LOVE	-0.23	0.12	-0.46	0.01	-1.90	0.06
FRIENDS	0.41	0.17	0.07	0.74	2.40	< .05*
KIDS	-0.15	0.13	-0.41	0.10	-1.17	0.24
RELATIVES	-0.05	0.17	-0.38	0.27	-0.33	0.74
HOME	-0.09	0.18	-0.45	0.27	-0.51	0.61
NEIGHBORHOOD	0.19	0.19	-0.18	0.56	1.02	0.31
COMMUNITY	-0.27	0.20	-0.66	0.12	-1.35	0.18

Notes: **p < .01, *p < .05

H2. *Quality of life and risk-taking behavior influence the perceived importance of apps for customers.*

The hypothesis that quality of life factors and risk-taking behavior influence the importance of apps for customers was tested using linear regression. The analysis results show an R^2 of 0.088, indicating that approximately 8.8% of the variance in the perceived importance of apps can be explained by the predictors included in the model. Among the predictors, two quality of life factors were found to have significant relationships with the importance of apps: satisfaction with learning ($\beta = 0.11$, $p < .05$) and satisfaction with love ($\beta = 0.07$, $p < .05$).

Satisfaction with learning showed a positive and statistically significant relationship, suggesting that individuals who are more satisfied with their opportunities for learning perceive shopping apps as more important. This might reflect a tendency among such individuals to value tools that enhance their efficiency or access to information, aligning with their learning-oriented mindset. Similarly, satisfaction with love was positively and significantly associated with app importance. This suggests that individuals who are satisfied with their romantic relationships or affection in their lives may place higher value on apps, potentially due to their focus on convenience and connecting with others. Other predictors, including risk-taking behavior and the remaining quality of life factors, did not show statistically significant relationships with the perceived importance of apps ($p > 0.05$). Based on these findings, H2 was partially supported.

Table 2. *Results of the linear regression analysis for the relationship between quality of life factors, risk-taking and the perceived importance of applications*

			95% Confidence Interval			
Predictor	**Estimate**	**SE**	**Lower**	**Upper**	**t**	**p**
HEALTH	0.04	0.05	-0.05	0.10	0.83	0.41
SELF ESTEEM	-0.05	0.04	-0.12	0.01	-1.11	0.27
PURPOSE	0.02	0.05	-0.07	0.13	0.49	0.63
MONEY	0.01	0.05	-0.08	0.10	0.28	0.78
WORK	-0.03	0.04	-0.11	0.034	-0.97	0.33
PLAY	0.06	0.04	-0.02	0.14	1.54	0.13
LEARN	0.11	0.05	0.02	0.20	2.31	< .05*
CREATIVITY	0.01	0.04	-0.07	0.09	0.24	0.81
HELP	-0.06	0.04	-0.14	0.02	-1.53	0.13

			95% Confidence Interval			
Predictor	**Estimate**	**SE**	**Lower**	**Upper**	**t**	**p**
LOVE	0.07	0.03	0.01	0.12	2.471	<.05*
FRIENDS	-0.07	0.04	-0.10	0.05	-0.69	0.49
KIDS	0.05	0.03	-0.00	0.11	1.82	0.07
RELATIVES	0.02	0.034	-0.05	0.09	0.59	0.55
HOME	-0.08	0.04	-0.16	0.00	-1.92	0.06
NEIGHBORHOOD	-0.01	0.04	-0.10	0.07	-0.32	0.75
COMMUNITY	0.05	0.04	-0.08	0.14	1.19	0.23
RISK	0.01	0.01	-0.02	0.03	0.52	0.60

Notes: *p < .05

DISCUSSIONS

The results of this study provide some empirical evidence on the relationship between quality of life and risk-taking behaviors and their influence on the perceived importance of digital applications. The first hypothesis (H1) was confirmed, such that certain dimensions of quality of life - satisfaction with learning, satisfaction with creativity, and satisfaction with friends - were found to be significantly associated with risk-taking behaviors. Thus, satisfaction with learning had a negative relationship with risk-taking, suggesting that individuals less satisfied with their educational experiences tend to seek stimulation in riskier activities. This result is consistent with previous research on compensatory behaviors, according to which dissatisfaction in one area of life may lead to seeking satisfaction in other areas (Hewett et al., 2017). On the other hand, the positive relationships of creativity and friendships with risk-taking indicate that people who feel creatively or socially fulfilled are more likely to explore new experiences.

Regarding the second hypothesis (H2), the results suggest that quality of life factors have a moderate but significant influence on how individuals perceive the importance of digital applications.

Satisfaction with learning and satisfaction with love were the only significant predictors, indicating that individuals who are fulfilled in these areas are more likely to place greater importance on applications, possibly as tools to improve their personal effectiveness or facilitate their social connections.

From a psychological perspective, these findings are consistent with self-determination theory (Deci & Ryan, 2000), which argues that individuals seek to fulfill their basic psychological needs, such as competence and relatedness. High levels of satisfaction with learning may reflect an intrinsic motivation for personal development, making individuals more likely to use digital tools that support educational or professional advancement. Similarly, satisfaction with romantic relationships could lead to a greater appreciation of technologies that facilitate communication and emotional closeness, thus reinforcing the role of digital applications in maintaining social bonds.

Surprisingly, risk-taking behavior was not a significant predictor, suggesting that real-life risk preferences do not necessarily influence how individuals perceive the usefulness of digital apps. This finding highlights a distinction between offline risk-taking tendencies and attitudes toward technology.

CONCLUSIONS

The study highlights the complex role that quality of life plays in shaping both behavioural tendencies and interactions with the digital environment. The results support the idea that dissatisfaction in certain areas of life may lead to the engagement in risky behaviour, while fulfilment in other areas may lead to the controlled risk exploration. The study also suggests that perceptions of digital applications are more likely to be influenced by general satisfaction with certain aspects of life than by general risk-taking tendencies. These findings contribute to a broader understanding of how subjective well-being interacts with decision-making, both in real life and in the digital environment.

Limitations and Future directions

Future research should explore other psychological and behavioral factors that might mediate or moderate the observed relationships. Longitudinal studies could help establish causality and examine how changes in quality of life influence risk-taking behaviors and interaction with digital apps over time. Also, a differentiated analysis of different types of apps could provide a more detailed insight into how technology is integrated into everyday life. In addition, given the increasing digitalization of everyday experiences, future studies could investigate the impact of app use on quality of life, exploring whether and how technology can become a tool for improving well-being rather than merely reflecting existing psychological states.

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Conflicts of Interest/Competing Interests

The authors declare no conflicts of interest.

Availability of Data and Material

Data are available upon request.

Author Contributions

All authors contributed equally to this study.

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