International Review of Management and Marketing

ISSN: 2146-4405

available at http: www.econjournals.com

International Review of Management and Marketing, 2027, 17(1), 427-436.

Narcissism and Feedback: The Role of Generational Cohorts in Shaping Responses

Sherine Sherif Badawi[1]*, Abdelbaset Queiri[2]

[1]Faculty of Business Studies, Arab Open University- Bahrain, [2]Faculty of Business and Management, Muscat University, Muscat, Sultanate of Oman. *Email: sherine.badawi@aou.org.bh

Received: 21 April 2026 **Accepted:** 14 August 2026 **DOI:** https://doi.org/10.32479/irmm.24138

ABSTRACT

The purpose of this study is to examine how generational cohorts (Millennials and Generation X) moderate the relationship between narcissism and hostility toward negative feedback, as well as between narcissism and the efforts exerted after receiving negative feedback. A total of 272 employees, comprising Millennials and Generation X, who were sourced from occupational industries in the Sultanate of Oman, were examined using a two-step structural equation modelling analysis. The findings suggest that Millennials have a greater level of narcissism than Generation X, it was also found that Millennials show stronger and positive relationship between narcissism and hostility towards negative feedback than Generation X. Furthermore, generational cohorts did not moderate the relationship between narcissism and efforts expended after receiving negative feedback. Organizations should be mindful when tailoring feedback strategies to their employees. We recommend that organizations pay special attention to Millennials when delivering negative feedback, as they tend to exhibit more hostile reactions compared to their counterparts. This heightened hostility may, in turn, lead to increased counterproductive behaviour.

Keywords: Narcissism, Negative Feedback, Efforts Expended, Generational Cohorts, Millennials, Generation X
JEL Classification: L2

1. INTRODUCTION

The current workforce has undergone significant demographic shifts. It is of the first time that the current workplace consists of four generational cohorts (i.e., baby boomers, generation X, Millennials and generation Z) (Mahmoud et al., 2021). While Generation Z started to influx into the workplace at slow rate, large portion of baby boomers started their retirement. Therefore, Millennials and Generation X are currently constituting a substantial portion of the workforce (Gabrielova and Buchko, 2021). It is argued that one fit for all HR practices across all generational cohorts may be rendered to be less effective (Queiri et al., 2014; Twenge, 2010). There are calls from scholars to appreciate the differences among the generational cohorts, as these cohorts have different expectations from the workplace (Ng et al., 2024). Appreciating the differences allow organizations to better understand their employees' attitudes and behaviors to specifically tailor the right strategies to them. What is already known about baby boomers best suitable HR practices, may not be held true for the new generations. Therefore, embracing generational differences allow organizations to effectively manage issues related to promoting positive attitudes, managing retention and engagement, conflict resolutions and individual's work performance (Stewart et al., 2017).

It is further argued that these cohorts show different reactions and emotions in response to varied workplace events (Lyons and Kuron, 2014). Such differences in reactions and emotions to workplace events are attributed to the changes occurred over the personality profile of these generations (Lissitsa and Laor, 2021; Twenge et al., 2008). One main difference in the personality profile, is that Millennials individuals are empirically found to

This Journal is licensed under a Creative Commons Attribution 4.0 International License

have a higher level of narcissism compared to its counterparts (Wang et al., 2019; Ray and Singh, 2018; Anderson et al., 2016; Ng et al., 2022; Westerman et al., 2012). Narcissism is a relatively stable individual difference that consists of grandiosity, self-love, and inflated self-views (Campbell et al., 2011). Scholars and anecdotal information related the increased level of narcissism among Millennials to wide range of negative emotions and adverse work-related behavior including but not limited to more hostile reactions to the source of negative feedback followed by less efforts expended to perform future tasks. This is because narcissism as a personality trait manifest itself in more superiority and grandiosity, suggesting that Millennials are further less tolerate to the receptive of negative feedback and criticism compared to their counterparts from other generations. Millennials are described to have false self-esteem and a high sense of entitlement, and desire more power and authority and they are very sensitive towards negative feedback more than other generations are (Gabriel et al., 2020). Anderson et al. (2016) described Millennials to be the "most praised generation," they need constant feedback but it should be a positive one or otherwise it will be seen as a criticism and brings tears and resignation. Other stream of researches argued that narcissistic individuals relatively show more hostility towards the negative feedback and suggest that the relationship between narcissism and hostility to negative feedback is a positive one. Thereafter, such hostility towards negative feedback creates a prompt response to decrease the efforts expended (Choi et al., 2018; Brown et al., 2016; Belschak and Den Hartog, 2009). However, these studies did not segregate the generational difference effect and therefore Millennials are expected to react with more hostility to negative feedback and probably show less efforts expended afterwards compared with other generations (Buser et al. 2016; Swift and Peterson, 2018).

With said, empirical studies investigating the moderation effect of generational differences on the relationship between narcissism and hostility to negative feedback and efforts expended are of short supply. Instead, there are few studies who have shown that narcissism increases employees' hostility towards negative feedback without considering generational differences (Martinez et al., 2008; Reidy et al., 2008).

Others such as, Gardner and Pierce (2011) empirically found that narcissism correlated positively with hostility towards negative feedback and narcissistic employees expend less effort towards work after receiving negative feedback, which demonstrates a different behavior compared to non-narcissistic employees. The argument presented in this study suggests that Millennials driven by their increased level of narcissism will have a higher hostility towards negative feedback than previous generations. The following research questions are therefore investigated in this study:

RQ1: Do Millennials have a higher level of narcissism compared to Generation X?

RQ2: Does narcissism influence hostility towards negative feedback differently across the two cohorts (i.e., Millennials and Xers)?

RQ3: Does narcissism differently influence the efforts expended across the two cohorts (Millennials and Xers)?

This study brings theoretical contribution by combining the self-regulatory model of narcissism and Generational Gap Theory to enhance our understanding on the interaction effects of the generational cohorts on narcissism, hostility towards negative feedback and efforts expended afterwards. Furthermore, this study brings practical contribution by bringing organizations attention on the differences between the generations at workforce, so these organizations can tailor generational-wise practical strategies to address negative feedback. Furthermore, we contribute to the body of knowledge by drawing an important conclusion on this particular sample from Arabic region, which is culturally different. The Arab work culture is influenced by the tribal Bedouin values of loyalty and honor. Several studies have indicated that employees in Arab countries possess unique personalities and display significant variations in their work-related outcomes compared to their counterparts from Western countries (Elbanna et al., 2020; Al-Khatib et al., 2005). Maitner et al. (2017) argued that cultural variables influence psychological outcomes differently for different identities, suggesting that Arab culture of honor drive employees in Middle East to be more hostile to criticism, insults and negative feedback compared to employees from dignity culture as in the European countries.

2. THEORETICAL UNDERPINNING AND HYPOTHESES DEVELOPMENT

We build on self-regulatory model of narcissism, which articulates that narcissistic individuals employ self-regulatory strategies to protect their ego from threating situation. For this reasons, narcissistic individuals tend to have higher hostility towards the source of negative feedback, because such negative feedback pose risks to their self-esteem and prestigious. Therefore, they become more hostile and tend to decrease their efforts expended as self-regulatory strategies to restore their ego (Bogaerts et al., 2021). Moreover, we build on Giancola's (2006) concept of "Generational Gap Theory," which argues that distinct life experiences, socio-economic events, and varying upbringing practices have contributed to the development of unique generational personalities. Consistent with this theory, longitudinal studies provide empirical evidence confirming that differences in personality traits among generational workforces are scientifically substantiated rather than fictional (Twenge and Campbell, 2012). One significant different that has been regarded to be responsible of generation's reactions and emotions at workplace is the the upward trend of narcissism among Millennials. Based on this, we argue that Millennials will intensify the negative relationship between narcissism and hostility towards negative feedback and efforts expended.

2.1. Narcissism Across Generational Cohort

Wong et al. (2008) examined personality differences across three generations in Australia; Baby Boomers, Gen X, and Millennials. Their findings were contrary to the generational stereotypes that have been pervasive in management literature. They found few meaningful differences in personality traits which were attributed to age effects rather than generational effects. Twenge et al. (2008) conducted a study using different

methodology "cross-temporal meta-analysis" and found that narcissism levels have risen over the generations in 85 samples of American college students. Trzesniewski et al. (2008) undermine the findings' of Twenge et al. (2008) and provided a piece of commentary on the limitation of convenience sampling used in Twenge's study "Students from U.S Colleges versus the use of more representative sampling" and they highlighted issues surrounding the interpretation of the Narcissistic Personality Inventory. However, the study of Trzesniewski et al. (2008) lacked scientific enquiries and empirical evidence. The debate that Millennials are more narcissistic than their predecessors was subject to further investigation in other studies from the Western context. Wetzel et al. (2017) posed a similar question on whether "Millennials are more narcissistic than their predecessors" and employed the measurement equivalence technique of the narcissistic personality inventory (NPI) across the three cohorts. This technique was overlooked in prior research addressing debates about the so-called "narcissism epidemic." Their findings contradict the claim that Millennials are more narcissistic than their predecessors.

In response to these studies, Twenge (2013) reported that 11 studies empirically showed a generational increase in narcissism, of which seven used non-college samples. For instance, Stinson et al. (2008) empirically found an increase in narcissism disorders using a national representative sample of 35,000 people in the U.S. The study examined lifetime prevalence, not current symptoms; thus, the upward shift is due to generation, not age. Moreover, four cross-sectional studies showed higher levels of narcissism among Millennials compared to older adults using non-college samples from different countries, such as the U.S., China, and New Zealand (Roberts et al., 2013; Cai et al., 2012; Wilson and Sibley, 2011).

Many of these studies on narcissism have been conducted in the Western context. A context which is well known to be influenced by individualism. Studies on narcissism differences are in short supply in Arab countries. Such countries endorse collectivist cultures which influence a wide range of assumptions, beliefs, and values. Gao et al. (2019) provided empirical evidence from a collectivist culture context "China" and found that Chinese youth are not more narcissistic compared to their previous generations.

In view of the above inconclusive argument and the dearth of studies from the Arab region, the following hypothesis is proposed:
H_1: Millennials will have greater narcissism than Generation X.

2.2. Narcissism and Hostility Towards Negative Feedback Across Multi-Generation

Ng et al. (2010) and Alsop (2008) argued that Millennials favor positive feedback on their performance, and these individuals fear negative feedback because they believe that this type of feedback often challenges self-worth. This generation regards negative feedback as a potential damage to their self-perception of superiority. The literature review on Millennials creates a prevailing standpoint that this generation also needs constant and consistent feedback. It is the vulnerable nature of narcissism that drives Millennials to continuously seek feedback from the surrounding social environment in order to affirm their feelings of self-worth (Anderson et al., 2016).

Millennials' reactions to negative feedback are related to narcissism. Atlas and Them (2008) found that individuals who scored high on covert narcissism are sensitive to criticism and tend to avoid constructive feedback opportunities. Morf and Rhodewal (2001) ascribed Millennials to common behaviors, such as arrogance, hostility, and aggression. These behaviors are most observable by others. The relationship between narcissism and hostility towards negative feedback is rooted in the earlier articulated theoretical underpinning of the dynamic self-regulatory model of narcissism. This model offers insight into the manifestations of narcissism (i.e., hostility towards negative feedback).

Among the few empirical studies, Gardner and Pierce (2011) found a positive correlation between narcissism and hostility towards negative feedback. It was argued on similar basis that when narcissists fail to receive the positive feedback which they crave for; they tend to react with more hostility. Other studies, such as (Barry et al., 2006), Brown (2004), and Martinez et al. (2008) empirically showed that narcissists react with hostility towards the source of criticism. All these studies agree that narcissists are dismissive of negative feedback. Kernis and Sun (1994) conducted an experiment in which participants were subjected to evaluation followed by positive and negative feedback. Following negative feedback, they found that narcissism was associated with perceiving the evaluation technique to be less diagnostic and the evaluator to be less competent.

Stone-Romero and Stone (2002) set forth an argument, building on an original feedback model but adding the cultural dimensions of (individualism and collectivism), explaining that societies ascribed to idiocentric self-esteem (individualism) have different reactions towards feedback than societies ascribed to allocentric self-esteem (collectivism). Individuals in societies with idocentric self-esteem as in Western cultures, are deemed to be more dismissive of negative feedback. Based on the above empirical findings that originate from Western cultures, most studies have documented that narcissists exhibit more hostility towards the source of negative feedback.

With reference to generational differences, it is expected that Millennials who are assumed to have high level of narcissism will show more hostility towards the source of negative feedback. Therefore, narcissism is expected to be more strongly related to hostility towards the source of negative feedback than for previous generations. However, these empirical findings originate in Western cultures. The argument of Stone-Romero and Stone (2002) may refute the replication of such findings when a sample is collected from the Arab region which is traditionally known for its collectivist culture. However, Whiteoak et al. (2006) reported that the values and attitudes of people in the Middle East are changing towards individualism. Given the above argument and the absence of empirical validation, the following hypotheses need to be substantiated:

H_2: Millennials will show stronger positive association between narcissism and hostility towards negative feedback than will the Xers.

2.3. Narcissism and Efforts Expended after the Reception of Negative Feedback

Following the reception of negative feedback, individuals with high narcissism are unlikely to increase their effort levels. They are reluctant to increase their level of efforts because they doubt the veracity of the feedback in the first place. Narcissists manifest higher cortisol reactions to unfavorable social feedback than do those with high self-esteem (Ford and Collins, 2010). Gardner and Pierce (2011) found that the correlation between narcissisms and effort expended to be positive and insignificant, despite the theoretical proposition that suggests a negative relationship. Using a sample comprising a multigenerational workforce, Burawat (2023) empirically found a moderating effect of generational differences between narcissism and discretionary efforts. It was found that Millennials show a more negative association between narcissism and discretionary efforts than their counterparts. In other words, previous generations will exert more effort in response to their narcissism levels than Millennials.

Studies examining narcissism and efforts expended are scarce. We argue that Millennials, with their expected high level of narcissism compared to their counterparts, will react to negative feedback by making less effort to perform future tasks. The effects of generational differences between narcissism and efforts expended are not substantiated in the previous literature; therefore, we hypothesis the following:

H_3: Millennials will show stronger negative association between narcissism and efforts expended after receiving negative feedback than will the Xers.

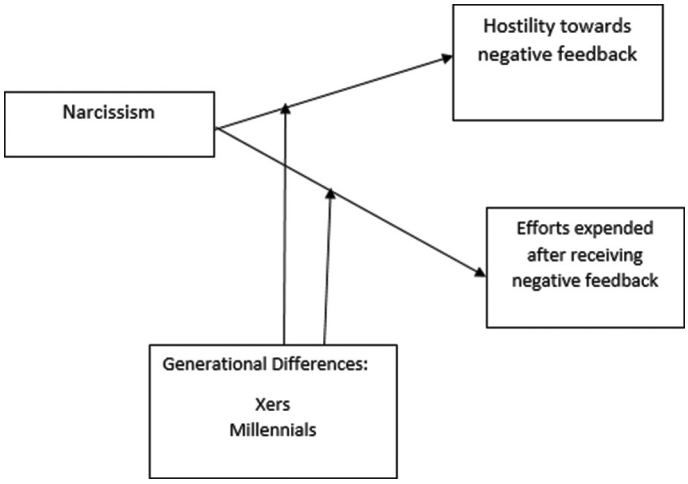
2.4. Proposed Framework

Figure 1 provides the proposed model for testing. The model includes one independent variable (i.e. narcissism), two dependent variables and with a moderating variable represented as a generational cohort.

3. RESEARCH METHODS

The objective of this study is to examine the possible moderation effects of two main generational cohorts (i.e., Generation X and Millennials) on: (a) the relationship between narcissism and hostility towards negative feedback, and (b) the relationship between narcissism and efforts expended. For this purpose, we collected a sample spanning the two cohorts. Other generational cohorts are not targeted in this study, such as baby boomers and Generation Z. We purposely focused on Generation X and Millennials, as these cohorts represent the largest number of current workforce.

Figure 1: Conceptual model



The data was collected between May 2024 and October 2024. The authors approached organizations belong to occupation industries in Oman including; financial, education and health sectors and approved to distribute questionnaire for organizations who accepted to participate. A self-administered questionnaire was deemed useful for shortening the data collection time and mitigating biased results from a non-targeted sample (Mousa et al., 2021). The questionnaire was prepared in English and translated back into Arabic language by a professional translation, to avoid common method bias that may arise from difficulty of understanding the English version for non-native English speakers.

The employees in the aforementioned sectors were well informed of the study's aim and assured of anonymity and confidentiality. The study adopted a convenience sampling approach, as only willing and available employees received the questionnaire. Additionally, a convenience sampling approach was chosen due to a lack of official statistics on the total number of employees in these sectors (Basaad et al., 2023).

The study utilized G*Power software to determine the appropriate sample size based on specific parameters (Faul et al., 2007), commonly used when the target population size is unknown. Through calculations, a sample size of 135 was deemed necessary based on certain inputs (effect size "f2" = 0.15, $\alpha = 0.05$, power = 0.95, number of predictors = 2). A medium effect size of 0.15 was employed, consistent with related research in the same field (Asurakkody and Kim, 2020). A power value of 0.8 or higher is typically acceptable in social science studies (Jhantasana, 2023; Cohen, 1992). To account for non-response rates and potential sampling errors, 300 questionnaires were distributed, which is more than the required sample size of 135 respondents (Elkheloufi et al., 2025; Hair et al., 2016). Furthermore, the authors aimed to have comparable sample size from both generations, and for this reason they distributed more than minimum required sample.

Upon inspection, some returned questionnaires lacked responses or contained random missing data. Others were excluded from

Table 1: Demographic profile of respondents

Dem. V.	Class	Frequency	Percentage
Gender	Males	137	50.37
	Females	135	49.63
Generational cohort	Millennials	185	68.02
	Generation X	87	31.98
Level of education	Diploma or lower	49	18.01
	Bachelor degree	150	55.15
	postgraduate's degree	73	26.84
Working years of experience	From 1 to 5 years	56	20.58
	From 6 years to 10 years	40	14.71
	More than 10 years	176	64.71

further analysis, as the respondents belong to different generational cohorts, which do not serve the purpose of the sample. The final sample consisted of 272 respondents, representing a response rate of 90%. The 272 respondents included 137 males and 135 females. The sample also represents two generational cohorts adequately with 185 respondents from the millennial cohort and 87 respondents from the Generation X cohort. The rest of the demographic information is presented in Table 1.

3.1. Measurement of Constructs

Narcissism was measured using a 5-point Likert scale ranging from strongly disagree to strongly agree. The scale comprises 16 items representing the short version of narcissism personality inventory (NPI). It includes some of the following statements: I like to be the center of attention, I think I am a special person, I insist upon getting the respect that is due me, and I can make anybody believe anything I want them. The inventory scale was originally developed by Raskin and Terry (1988) and the short form of the scale was developed by (Ames et al., 2006). Originally, the alpha coefficient for the composite measure of narcissism was 0.84.

Generational cohort was measured according to the respondents' birth year. While there is no consensus in the literature on year demarcations of the different generational cohorts, we used broad and generally agreed birth ranges from the literature: 1981-2000 for Millennials and 1961-1980 for Xers (Lamm and Meeks, 2009). Dummy variable is created for the generational cohort. Millennials and Xers were assigned values of one and zero, respectively.

Hostility towards negative feedback was measured using a four-item scale adopted from (Gardner and Pierce, 2011). The scale consists of some of the following statements: I get very annoyed by people who criticise my performance, and I really dislike people who say bad things about my performance. The scale originally had a Cronbach Alpha equals to 0.84.

Efforts expended after receiving negative feedback were measured using a three-item scale adapted from (Gardner and Pierce, 2011; Kim and Lee, 2019). The scale consists from the following items; When I receive a negative feedback on my performance, I will increase my efforts next time I perform a task, a negative feedback consists of general criticisms will increase my efforts next time I perform a task and receiving words such as "more efforts required" or "wrong" will increase my efforts next time I perform a task.

3.2. Addressing Common Method Bias

According to Podsakoff et al. (2003), common method bias arises from different sources, including self-reported bias, social desirability bias, and item characteristic effect, which are concerns in this study. In order to alleviate the concerns related to self-reports and maintaining social desirability, we adapted validated scales to measure our items. These scales are validated by scholars in their respective fields and against complexity and ambiguity. Moreover, the researchers provided full assurance to the respondents to protect their anonymity, with a clear aim that this study is conducted for academic purposes only (Yan et al., 2024). Similar to Basaad et al. (2023), we also applied a counterbalanced technique to mitigate the likelihood of common method bias, whereby items from different constructs were presented in the questionnaire in a random order. Beyond the procedural remedies, this study also applied a statistical remedy by conducting a Harman's single factor test to investigate if common method variance bias exists (Podsakoff et al., 2003; Zhang et al., 2022).

4. DATA ANALYSIS AND RESULTS

4.1. Descriptive Statistics

Table 2 presents the descriptive statistics for all three variables proposed in this study. All variables have skewness and kurtosis values that fall within the recommended range of +2 and −2 to indicate normality (De Carlo, 1997). All the three variables have consistency demonstrated by Cronbach's Alpha above 0.7.

Table 3 presents the pairwise correlation among the proposed variables. Narcissism is positively and significantly correlated to hostility towards negative feedback and efforts expended after receiving negative feedback. An increase in narcissism results in more hostility towards negative feedback; however, it also increases narcissism, resulting in greater efforts expended.

4.2. Measurement Model

To ensure that our variables have internal consistency and convergent and divergent validity, a measurement analysis in SEM is performed. Items related to hostility towards negative feedback and efforts expended have an adequate factor loading value of above 0.7. Except the item HOS 4, which has a loading factor equals to 0.41, but since AVE and CR of HOS construct is above the recommended value, it is decided to keep this item (Hair et al., 2016). Items such as NAR2, NAR5, NAR7, NAR10 and NAR 11 are deleted from further analysis, in order to improve AVE to reach the recommended value of above 0.5 (Hair et al., 2016). Accordingly, the narcissism scale contained 11 items. Table 4. shows that all three variables have an acceptable amount of AVE and composite reliability (CR) above 0.5 and above 0.7, respectively (Hair et al., 2016).

Additionally, we used the Fornell and Larcker (1981) approach to compare the AVEs square root with correlations among the proposed constructs to assess discriminant validity. If the square roots of AVEs of the construct itself is greater than any of the correlation coefficients, then the discriminant validity is established. This is evident in Table 5, which indicates that

Table 2: Descriptive statistics and relatabilities

Variables	n	Mean	SD	Skewness	Kurtosis	Items No.	Cronbach's Alpha
NAR	272	3.13	0.67	−0.175	0.37	16	0.871
HOS	272	2.8	0.81	−0.069	-−.293	4	0.727
EE	272	3.25	0.68	−0.479	0.246	3	0.837

NAR: Narcissism, HOS: Hostility towards negative feedback, EE: Efforts expended

the AVEs (highlighted in bold) are higher than other construct correlation values.

The presence of common method bias (CMB) was investigated using Harman's single factor extraction test. CMB would be present, if the extracted single factor accounts for more than 50% of the total variance (Fuller et al., 2016). Table 6 indicates otherwise, the extracted single factor account for only 22.125% of the total variance.

4.3. Tests of Hypotheses

H_1 was tested using an independent two-sample t-test to investigate whether there is a difference in narcissism between the two cohorts, namely, Millennials and Generation X. Results of the t-test are presented in Table 7. H_1 is supported, indicating a significant difference between the mean score between Millennials and Generation X at a P=0.035. Millennials have higher narcissism than Generation X with mean value of 3.1931 and 3.0094 respectively and this difference in mean is statistically significant.

Table 3: Pairwise correlation

	NAR	HOS	EE
NAR	1		
HOS	0.280**	1	
EE	0.242**	0.076	1

**Correlation is significant at P<0.05

Table 4: Factor loading of the reflective constructs

Variable	Item	Loading	CR	AVE	VIF
NAR	NAR1	0.616			
	NAR3	0.648			
	NAR4	0.627			
	NAR6	0.680			
	NAR8	0.649			
	NAR9	0.695	0.884	0.514	1.132
	NAR12	0.610			
	NAR13	0.709			
	NAR14	0.664			
	NAR15	0.739			
	NAR16	0.786			
HOS	HOS1	0.836			
	HOS2	0.829	0.831	0.566	1.093
	HOS3	0.839			
	HOS4	0.417			
EE	EE1	0.873			
	EE2	0.902	0.902	0.755	1.049
	EE3	0.830			

CR: Composite reliability, AVE: Average variance extracted

Table 5: Divergent validity of constructs

	NAR	HOS	EE
NAR	0.644		
HOS	0.268	0.752	
EE	0.17	−0.046	0.869

NAR: Narcissism, HOS: Hostility towards negative feedback, EE: Efforts expended

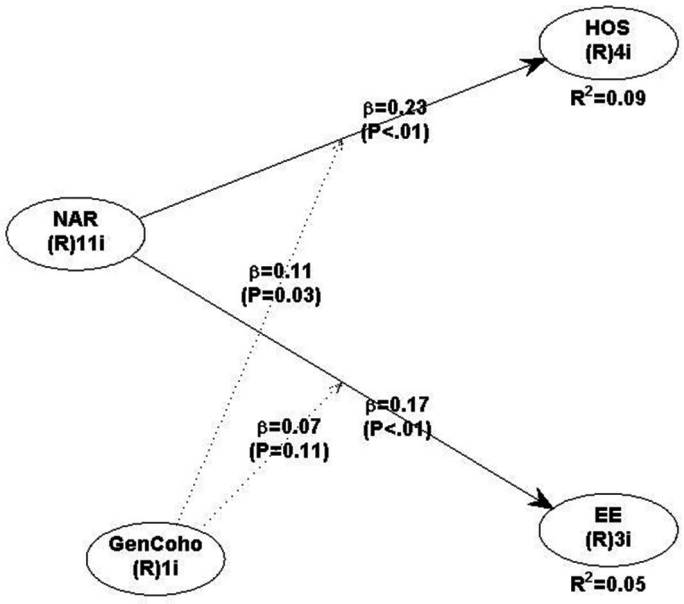
H_2 and H_3 are tested using path analysis modelling as shown in Figure 2, H_2 proposes that Millennials will show a stronger positive association between narcissism and hostility towards negative feedback than Xers will. H_2 was supported by a significant and positive interaction effect between narcissism and generational cohorts ($\beta = 0.11$, $P < 0.05$), indicating that the relationship between narcissism and hostility towards negative feedback is significantly more positive for Millennials when compared to Xers. H_3 is not supported, as the interaction effect between narcissism and generational cohort is insignificant ($\beta = 0.07$ $P > 0.1$), indicating that generational cohort does not play the moderating role in the relationship between narcissism and efforts expended. Furthermore, narcissism has a positive relationship with hostility towards negative feedback ($\beta = 0.23$, $P < 0.01$) and with efforts expended ($\beta = 0.17$ $P < 0.01$). The model explains 9% of the variance in hostility and 5% of the variance in efforts expended. Table 8 shows the aforementioned details.

Furthermore, Figure 3 illustrates that the relationship between narcissism and hostility towards negative feedback for Millennials is positive and stronger than for Generation X. However, Figure 4 indicates that the generational cohort has no moderating effects between narcissism and efforts expended.

5. DISCUSSION

The purpose of this study is to explore differences in narcissism levels between two cohorts: Millennials and Generation X. Additionally, the study investigates whether generational differences moderate the relationship between narcissism and

Figure 2: Path analysis



Gencoho: Generational cohort measured using a dummy variable

Table 6: Harman's single factor test

Factor	Initial eigenvalues		Cumulative %	Extraction sums of squared loadings		Cumulative %
	Total	Percentage of variance		Total	Percentage of variance	
1	6.032	25.135	25.135	5.31	22.125	22.125

Table 7: t-test

Variable	Generational cohort	n	Mean	t-test value	df	P-value
NAR	Millennials	185	3.1931	2.123	270	0.035
	Generation X	87	3.0094			

NAR: Narcissism

Table 8: Hypotheses testing

Hypotheses	β path	P-value	Result	Moderation effect size
H_2	0.23	0.03	Supported	0.0251
H_3	0.07	0.11	Not supported	0.0103

hostility toward negative feedback, as well as the relationship between narcissism and effort exerted following negative feedback.

The results of the study confirm the existence of mean-level cohort differences in narcissism, supporting our first hypothesis that Millennials exhibit higher levels of narcissism than Generation X. Additionally, moderation analysis provided empirical evidence that generational cohort moderates the relationship between narcissism and hostility toward negative feedback, confirming our second hypothesis. Specifically, Millennials demonstrate a stronger positive relationship between narcissism and hostility toward feedback compared to Generation X. However, our third hypothesis—that generational cohort moderates the relationship between narcissism and effort expended—was not supported.

The support for the first hypothesis, which stems from a different context, validates the arguments of scholars who have suggested that Millennials exhibit a rising trend of narcissism compared to previous generations (Twenge, 2013; Roberts et al., 2013; Cai et al., 2012; Wilson and Sibley, 2011). These generational differences in narcissism have significant implications for the workplace, one of which is hostility toward negative feedback.

Our findings align with those of Subra (2023) and Krizan and Johar (2015), who argued that narcissists tend to experience negative emotions in response to negative feedback, leading to increased hostility. We propose that Millennials, due to their heightened levels of narcissism, are more likely to exhibit hostility toward negative feedback compared to Generation X or other generations. Having been nurtured to feel a strong sense of self-worth and receive praise from superiors, Millennials may react with anger and attack sources of criticism (Anderson et al., 2016).

Compared to other generations, Millennials are often described as having a heightened sense of entitlement, characterized by an overestimation of their contributions, as well as greater sensitivity to negative feedback and increased aggression. These reactions to criticism can be understood through self-regulatory models of narcissism, which suggest such behavior is an attempt to regain dominance and control in their social environment. However, our findings contradict Anderson et al.'s (2016) proposition that "Millennials will respond more favorably to negative feedback." Instead, we found that Millennials are more hostile to negative feedback, a reaction driven by their stronger narcissistic tendencies.

Figure 3: Moderation standardized effects between narcissism and hostility towards negative feedback

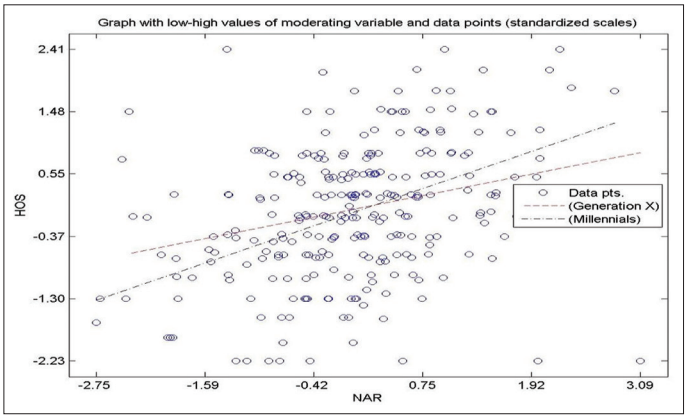
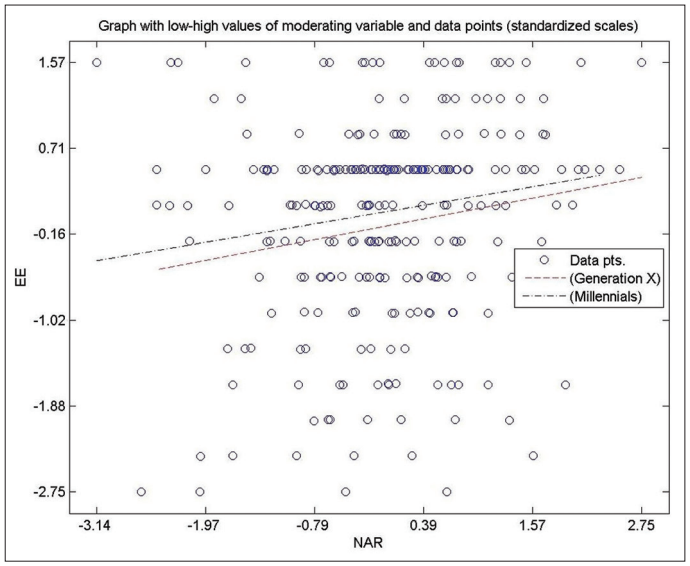


Figure 4: Moderation standardized effects between narcissism and efforts expended



Furthermore, narcissism in Millennials appears to be more complex than commonly perceived. Narcissism is not always associated with negative attitudes and behaviors. One unexpected finding of our study is that narcissism positively influences efforts expended. This contrasts with the study by Gardner and Pierce (2011), which found that narcissistic behavior was unrelated to efforts exerted following negative feedback from superiors. Our findings are consistent with the arguments of Stone-Romero and Stone (2002), who suggested that narcissistic individuals, due to their high self-esteem, are more likely to intensify their efforts to succeed. This response serves as a compensatory self-enhancement strategy to counteract negative feedback and restore a positive self-image. We argue that narcissistic individuals from the Middle East region prioritize status, prestige, and a culture of reasserting competencies. As a result, negative feedback on their performance is likely to affect these aspects. Therefore, narcissistic individuals are more likely to exert greater effort to regain approval and attention from their superiors and to avoid potential future repercussions. Additionally, narcissistic individuals may experience fear of marginalization, being ignored, or losing opportunities after receiving negative feedback, triggered by the

vulnerability component of narcissism. To compensate for this, they are likely to invest more effort.

It is important to note that Millennials and Generation X individuals exhibit a similar relationship between narcissism and efforts expended following negative feedback. This similarity is due to the dominance of narcissistic traits within these generations, which overshadows the moderating role of generational differences. Consequently, narcissism has a direct and strong positive influence on the efforts expended.

5.1. Theoretical Implication

Our findings contribute to the existing Generational Gap Theory by demonstrating that differences among generations are not absolute. Instead, there are meaningful distinctions that warrant attention. For example, we found that Millennials individuals exhibit a stronger positive relationship between narcissism and hostility toward negative feedback. However, both Millennials and Generation X show a similar relationship between narcissism and efforts expended.

Additionally, our findings enhance the self-regulatory model of narcissism by incorporating the role of generational differences. Specifically, individuals high in narcissism tend to react with greater hostility and anger toward the source of negative feedback, and this relationship is more pronounced for Millennials compared to those from other generations.

5.2. Practical Implications

Our findings highlight the importance of recognizing generational differences to foster workplace harmony. One critical area that demands management attention is how negative feedback may provoke varying levels of hostility across generational groups. Specifically, managers should exercise caution when delivering negative feedback to individuals from the Millennials cohort, as their elevated levels of narcissism may amplify their hostility toward such feedback. To address this, we propose a set of practices to help organizations manage hostility and mitigate potential negative consequences on workplace dynamics.

Firstly, organizations are advised to utilize the Feedback Sandwich Approach, structure feedback to begin with positive remarks, follow with constructive criticism, and conclude with reinforcement. For Millennials, organizations should ensure that the feedback is clear, constructive, and directly tied to their personal development. This approach helps narcissistic individuals from this cohort perceive feedback as a means to achieve their goals rather than as personal criticism. Organizations should focus on building rapport and professional development; feedback should aim to build rapport and emphasize the individual's professional growth and well-being. This generation tends to favor feedback that aligns with their aspirations and supports their personal and career development. Organizations should avoid public criticism, providing negative feedback to Millennials in public settings can provoke anger and retaliatory behavior, as maintaining prestige and ego is particularly important to this group. Delivering feedback privately and respectfully is essential to preserving their self-esteem and ensuring a constructive response. These strategies can help organizations address generational differences effectively, reducing workplace tensions and promoting a more harmonious and productive environment.

6. CONCLUSION, FUTURE RESEARCH AND LIMITATIONS

We concluded that Millennials in Oman exhibit higher levels of narcissism compared to their Generation X counterparts. This heightened narcissism makes Millennials individuals more hostile toward negative feedback. A notable finding was the dysfunctional aspect of narcissism, specifically its positive correlation with hostility toward negative feedback, which is more pronounced among Millennials. However, despite this hostility, the effort exerted following negative feedback remains consistent across both generations.

Like any study, this research has its limitations. First, our data was collected using a convenience sampling method, which restricts the generalizability of the findings. Second, the cross-sectional nature of our study prevents us from determining whether the observed results stem from generational differences or career-related effects. To address this limitation, future research should adopt longitudinal methodologies to disentangle generational effects from career stage and age-related influences, particularly in the Middle Eastern context.

Future research should also build on these findings by expanding the model to explore how hostility toward negative feedback affects various job-related outcomes, such as organizational commitment, turnover intention, and organizational citizenship behavior. Additionally, we encourage researchers to examine the role of generational cohorts—including Generation Z, Millennials, and Generation X—as potential moderators in the relationship between hostility toward negative feedback and these job-related outcomes.

These directions will enhance our understanding of generational dynamics in the workplace and provide deeper insights into managing diverse workforces effectively.

REFERENCES

Al-Khatib, J.A., Vitell, S.J., Rexeisen, R., Rawwas, M. (2005), Inter-country differences of consumer ethics in Arab countries. International Business Review, 14(4), 495-516.

Alsop, R. (2008), The Trophy Kids Grow Up: How the Millennial Generation is Shaking up the Workplace. United States: John Wiley and Sons.

Ames, D.R., Rose, P., Anderson, C.P. (2006), The NPI-16 as a short measure of narcissism. Journal of Research in Personality, 40(4), 440-450.

Anderson, E., Buchko, A.A., Buchko, K.J. (2016), Giving negative feedback to Millennials: How can managers criticize the "most praised" generation. Management Research Review, 39(6), 692-705.

Asurakkody, T.A., Kim, S.H. (2020), Effects of knowledge sharing behavior on innovative work behavior among nursing Students: Mediating role of Self-leadership. International Journal of Africa Nursing Sciences, 12, 100190.

Atlas, G.D., Them, M.A. (2008), Narcissism and sensitivity to criticism:

A preliminary investigation. Current Psychology, 27, 62-76.
Barry, C.T., Chaplin, W.F., Grafeman, S.J. (2006), Aggression following performance feedback: The influences of narcissism, feedback valence, and comparative standard. Personality and Individual Differences, 41(1), 177-187.
Basaad, S., Bajaba, S., Basahal, A. (2023), Uncovering the dark side of leadership: How exploitative leaders fuel unethical pro-organizational behavior through moral disengagement. Cogent Business and Management, 10(2), 2233775.
Belschak, F.D., Den Hartog, D.N. (2009), Consequences of positive and negative feedback: The impact on emotions and extra-role behaviors. Applied Psychology, 58(2), 274-303.
Bogaerts, S., Garofalo, C., De Caluwé, E., Janković, M. (2021), Grandiose and vulnerable narcissism, identity integration and self-control related to criminal behavior. BMC Psychology, 9, 1-11.
Brown, G.T., Peterson, E.R., Yao, E.S. (2016), Student conceptions of feedback: Impact on self-regulation, self-efficacy, and academic achievement. British Journal of Educational Psychology, 86(4), 606-629.
Brown, R.P. (2004), Vengeance is mine: Narcissism, vengeance, and the tendency to forgive. Journal of Research in Personality, 38(6), 576-584.
Burawat, P. (2023), Examining generational differences in the workplace: Narcissism, work centrality, and the impact on employee engagement and discretionary effort. Industrial and Commercial Training, 55(4), 509-543.
Buser, T., Gerhards, L., Van Der Weele, J. (2018), Responsiveness to feedback as a personal trait. Journal of Risk and Uncertainty, 56, 165-192.
Cai, H., Kwan, V.S., Sedikides, C. (2012), A sociocultural approach to narcissism: The case of modern China. European Journal of Personality, 26(5), 529-535.
Campbell, W.K., Hoffman, B.J., Campbell, S.M., Marchisio, G. (2011), Narcissism in organizational contexts. Human Resource Management Review, 21(4), 268-284.
Choi, E., Johnson, D.A., Moon, K., Oah, S. (2018), Effects of positive and negative feedback sequence on work performance and emotional responses. Journal of Organizational Behavior Management, 38(2-3), 97-115.
Cohen, J. (1992), Statistical power analysis. Current Directions in Psychological Science, 1(3), 98-101.
De Carlo, E.H., Wen, X.Y., Irving, M. (1997), The influence of redox reactions on the uptake of dissolved Ce by suspended Fe and Mn oxide particles. Aquatic Geochemistry, 3(4), 357-389.
Elbanna, S., Thanos, I.C., Jansen, R.J. (2020), A literature review of the strategic decision-making context: A synthesis of previous mixed findings and an agenda for the way forward. Management, 23(2), 42-60.
Elkheloufi, A., Benlahcene, A., Al Ansi, A.M., Queiri, A., Yean, T.F. (2025), Religiosity and positive emotions as predictors of work engagement among academics in Algeria. Journal of Applied Research in Higher Education, 17(5), 1987-2000.
Faul, F., Erdfelder, E., Lang, A.G., Buchner, A. (2007), G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behavior Research Methods, 39(2), 175-191.
Ford, M.B., Collins, N.L. (2010), Self-esteem moderates neuroendocrine and psychological responses to interpersonal rejection. Journal of Personality and Social Psychology, 98(3), 405.
Fornell, C., Larcker, D.F. (1981), Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39-50.
Fuller, C.M., Simmering, M.J., Atinc, G., Atinc, Y., Babin, B.J. (2016), Common methods variance detection in business research. Journal of Business Research, 69(8), 3192-3198.
Gabriel, A.G., Alcantara, G.M., Alvarez, J.D. (2020), How do millennial managers lead older employees? The Philippine workplace experience. Sage Open, 10(1), pp.1-11.
Gabrielova, K., Buchko, A.A. (2021), Here comes Generation Z: Millennials as managers. Business Horizons, 64(4), 489-499.
Gao, S., Thomaes, S., Van Den Noortgate, W., Xie, X., Zhang, X., Wang, S. (2019), Recent changes in narcissism of Chinese youth: A cross-temporal meta-analysis, 2008-2017. Personality and Individual Differences, 148, 62-66.
Gardner, D.G., Pierce, J.L. (2011), A question of false self-esteem: Organization-based self-esteem and narcissism in organizational contexts. Journal of Managerial Psychology, 26(8), 682-699.
Giancola, F. (2006), The generation gap: More myth than reality. Human Resource Planning, 29(4), 32.
Hair, J.F. Jr., Sarstedt, M., Matthews, L.M., Ringle, C.M. (2016), Identifying and treating unobserved heterogeneity with FIMIX-PLS: Part I-method. European Business Review, 28(1), 63-76.
Jhantasana, C. (2023), Should a rule of thumb be used to calculate PLS-SEM sample size. Asia Social Issues, 16(5), e254658-e254658.
Kernis, M.H., Sun, C.R. (1994), Narcissism and reactions to interpersonal feedback. Journal of Research in Personality, 28(1), 4-13.
Kim, E.J., Lee, K.R. (2019), Effects of an examiner's positive and negative feedback on self-assessment of skill performance, emotional response, and self-efficacy in Korea: ZA quasi-experimental study. BMC Medical Education, 19, 1-7.
Krizan, Z., Johar, O. (2015), Narcissistic rage revisited. Journal of Personality and Social Psychology, 108(5), 784.
Lamm, E., Meeks, M.D. (2009), Workplace fun: The moderating effects of generational differences. Employee Relations, 31(6), 613-631.
Lissitsa, S., Laor, T. (2021), Baby Boomers, Generation X and Millennials: Identifying generational differences in effects of personality traits in on-demand radio use. Technology in Society, 64, 101526.
Lyons, S., Kuron, L. (2014), Generational differences in the workplace: A review of the evidence and directions for future research. Journal of Organizational Behavior, 35(S1), S139-S157.
Mahmoud, A.B., Fuxman, L., Mohr, I., Reisel, W.D., Grigoriou, N. (2021), "We aren't your reincarnation!" workplace motivation across X, Y and Z generations. International Journal of Manpower, 42(1), 193-209.
Martinez, M.A., Zeichner, A., Reidy, D.E., Miller, J.D. (2008), Narcissism and displaced aggression: Effects of positive, negative, and delayed feedback. Personality and Individual Differences, 44(1), 140-149.
Maitner, A.T., Mackie, D.M., Pauketat, J.V., Smith, E.R. (2017). The impact of culture and identity on emotional reactions to insults. Journal of Cross-Cultural Psychology, 48(6), 892-913.
Morf, C.C., Rhodewalt, F. (2001), Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. Psychological Inquiry, 12(4), 177-196.
Mousa, M., Boyle, J., Skouteris, H., Mullins, A.K., Currie, G., Riach, K., Teede, H.J. (2021), Advancing women in healthcare leadership: a systematic review and meta-synthesis of multi-sector evidence on organisational interventions. EClinicalMedicine, 39.
Ng, E.S., Posch, A., Köllen, T., Kraiczy, N., Thom, N. (2024), Do "one-size" employment policies fit all young workers? Heterogeneity in work attribute preferences among the Millennial generation. BRQ Business Research Quarterly, 27(4), 483-504.
Ng, E.S., Posch, A., Köllen, T., Kraiczy, N., Thom, N. (2022), Do "one-size" employment policies fit all young workers? Heterogeneity in work attribute preferences among the Millennial generation. BRQ Business Research Quarterly, 27(4), 483-504.
Ng, E.S., Posch, A., Köllen, T., Kraiczy, N., Thom, N. (2024), Do "one-

size" employment policies fit all young workers? Heterogeneity in work attribute preferences among the Millennial generation. BRQ Business Research Quarterly, 27(4), 483-504.
Ng, E.S., Schweitzer, L., Lyons, S.T. (2010), New generation, great expectations: A field study of the millennial generation. Journal of Business and Psychology, 25, 281-292.
Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., Podsakoff, N.P. (2003), Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879.
Queiri, A., Yusoff, W.F.W., Dwaikat, N. (2014), Generation-Y employees' turnover: Work-values fit perspective. International Journal of Business and Management, 9(11), 199.
Raskin, R., Terry, H. (1988), A principal-components analysis of the narcissistic personality inventory and further evidence of its construct validity. Journal of Personality and Social Psychology, 54(5), 890.
Ray, P., Singh, M. (2018), Effective feedback for millennials in new organizations. Human Resource Management International Digest, 26(4), 25-27.
Reidy, D.E., Zeichner, A., Foster, J.D., Martinez, M.A. (2008), Effects of narcissistic entitlement and exploitativeness on human physical aggression. Personality and Individual Differences, 44(4), 865-875.
Roberts, R., Woodman, T., Hardy, L., Davis, L., Wallace, H.M. (2013), Psychological skills do not always help performance: The moderating role of narcissism. Journal of Applied Sport Psychology, 25(3), 316-325.
Stewart, J.S., Oliver, E.G., Cravens, K.S., Oishi, S. (2017), Managing millennials: Embracing generational differences. Business Horizons, 60(1), 45-54.
Stinson, F.S., Dawson, D.A., Goldstein, R.B., Chou, S.P., Huang, B., Smith, S.M., ... Grant, B.F. (2008), Prevalence, correlates, disability, and comorbidity of DSM-IV narcissistic personality disorder: results from the wave 2 national epidemiologic survey on alcohol and related conditions. Journal of Clinical Psychiatry, 69(7), 1033.
Stone-Romero, E.F., Stone, D.L. (2002), Cross-cultural differences in responses to feedback: Implications for individual, group, and organizational effectiveness. In: Research in Personnel and Human Resources Management. London: Emerald Group Publishing Limited. p275-331.
Subra, B. (2023), Why narcissists are more likely to be aggressive? The role of hostile attribution bias. International Journal of Psychology, 58(6), 518-525.
Swift, V., Peterson, J.B. (2018), Improving the effectiveness of performance feedback by considering personality traits and task demands. PLoS One, 13(5), e0197810.
Trzesniewski, K.H., Donnellan, M.B., Robins, R.W. (2008), Is "Generation Me" really more narcissistic than previous generations? Journal of Personality, 76(4), 903-918.
Twenge, J.M. (2010), A review of the empirical evidence on generational differences in work attitudes. Journal of Business and Psychology, 25, 201-210.
Twenge, J.M. (2013), "The evidence for generation me and against generation we." Emerging Adulthood, 1(1), 11-16.
Twenge, J.M., Konrath, S., Foster, J.D., Keith Campbell, W., Bushman, B.J. (2008), Egos inflating over time: A cross-temporal meta-analysis of the Narcissistic Personality Inventory. Journal of Personality, 76(4), 875-902.
Twenge, J.M., Campbell, S.M. (2012), Who are the Millennials? Empirical evidence for generational differences in work values, attitudes and personality. In Managing the new workforce. Edward Elgar Publishing. pp. 1-19.
Wang, J.V., O'Connor, M., McGuinn, K., Albornoz, C.A., Keller, M. (2019), Feedback practices in dermatology residency programs: Building a culture for millennials. Clinics in Dermatology, 37(3), 282-283.
Westerman, J.W., Bergman, J.Z., Bergman, S.M., Daly, J.P. (2012), Are universities creating millennial narcissistic employees? An empirical examination of narcissism in business students and its implications. Journal of Management Education, 36(1), 5-32.
Wetzel, E., Brown, A., Hill, P.L., Chung, J.M., Robins, R.W., Roberts, B.W. (2017), The narcissism epidemic is dead; long live the narcissism epidemic. Psychological Science, 28(12), 1833-1847.
Whiteoak, J.W., Crawford, N.G., Mapstone, R.H. (2006), Impact of gender and generational differences in work values and attitudes in an Arab culture. Thunderbird International Business Review, 48(1), 77-91.
Wilson, M.S., Sibley, C.G. (2011), 'Narcissism creep?': Evidence for age-related differences in narcissism in the New Zealand general population. New Zealand Journal of Psychology, 40(3), 89-95.
Wong, M., Gardiner, E., Lang, W., Coulon, L. (2008), Generational differences in personality and motivation: do they exist and what are the implications for the workplace?. Journal of Managerial Psychology, 23(8), 878-890.
Yan, L., Sha, L., Zhao, L., Li, Y., Martinez-Maldonado, R., Chen, G., ... Gašević, D. (2024), Practical and ethical challenges of large language models in education: A systematic scoping review. British Journal of Educational Technology, 55(1), 90-112.
Zhang, W., Yuan, G., Xue, R., Han, Y., Taylor, J.E. (2022), Mitigating common method bias in construction engineering and management research. Journal of Construction Engineering and Management, 148(9), 04022089.