

Scholars' Research Orientation Promotion through the Exegesis of the Interplay Between Academic Identity and Psychological Needs

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In higher education institutions, where scholars and academics have ever-evolving roles as research's contributors, most felt research support facilities were subpar in Malaysia. This indicates that academics' research orientation may not meet the overall needs of the higher education system. In a country home to several ethnicities, the diverse identities could potentially affect academics' research performance. This knowledge-gap motivates the study to examine how academics' identities could promote research orientation through the interplay between autonomy and relatedness on their competence when seen through the prism of self-determination. The study employed a structural equation modelling technique to analyze the collected data from 310 academics across 21 Malaysian universities. Participants reported that research orientation was significantly higher through satisfying their competence pushed by their autonomy and academic community relatedness motivated by their academic identity. The findings contribute to the self-determination theory by highlighting participants' pursuit of competence in their research orientation through autonomy and relatedness motivated by their academic identification. This study offers intriguing insights by evaluating the effects of academic identity in motivating psychological needs to make academics research oriented. This enables policymakers to develop more influential motivational strategies. Future research could expand to explore this phenomenon in more diverse settings.

Keywords: *Academic Identity, Higher Education, Psychological Needs, Research Orientation, Self-Determination.*

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Introduction

In higher education institutions, scholars and academics not only have to teach their students but also need to do research and contribute to it. Research orientation is essential to promote their research endeavors (Kwiek, 2018). These academic staff significantly boost their institutions' reputation and research performance. Therefore, these institutions ultimately strive to advance knowledge, research, and development management to prepare for effective strategies to manage the less desirable research scholars. Zainal Abidin et al. (2017) revealed that the longer these scholars stay in the research field, the more valuable they become.

Furthermore, the Malaysian government does recognize that the country's higher education system contributes significantly to its productivity as part of developing human capital, which is essential to creating a more developed nation because it boosts the country's competitiveness, productivity, and capacity for innovation (Azman et al., 2013). According to Malaysian department of information portal (2016), Malaysia is home to three (3) primary races: Malay, Chinese, and Indian. These races cohabit with a rich and shared history of various ethnicities, lifestyles, religions, and professional associations (Mushtaq Ahmed & Basir, 2019). Therefore, a patchwork of diverse identities could potentially affect the research performance of scholars. Given the 'academic identity' as one of these identities, the study is urged to address the following question: How does the identity of an academic influence research orientation?. Azman et al. (2013) stated that it was clear that scholars in Malaysia felt satisfied with the infrastructure and teaching facilities. They felt research support facilities were subpar. Moreover, according to a study carried out ten years later by Muhammad et al. (2023), they stated that only 24% of the 140 scholars at one of Malaysia's public institutions carried out research and were able to publish in 2021, suggesting that the majority of scholars have not carried out research. This indicates that Malaysia's scholars' research orientation likely has not met the overall expectations of the higher education institution system.

Moreover, pursuing a scholarly research orientation is influenced by several internal and external factors, which have been investigated in this area (Werker & Hopp, 2020). There is still a lack of studies revealing the role of academic identification on psychological needs satisfaction in promoting research orientation. It emerges as a crucial aspect but largely unexplored (Mula-Falcón et al., 2022). Comprehending the satisfaction of psychological needs intertwined with academic identity is essential to understanding the motivations behind the research endeavor (Hardy et al., 2020). Therefore, understanding scholars' research orientation pushes the study to explore the relationship between their identification and the satisfaction of their psychological needs. The study aims to unravel the role of motivating autonomy and relatedness that promote scholars' competencies. The focus on competence as a driving force behind research orientation sheds light on the intrinsic motivations that fuel scholars throughout their scholarly journeys.

The self-determination theory, which highlights the influence of psychological needs and the environment of self-determined motivation on behavior and performance, which scholars internalize into intrinsic motivations (Deci et al., 2016), was adopted in this study as it could express the driving force behind scholars' research orientation. The present study proposes that the convergence of academic identity and the satisfaction of psychological needs substantially impact the direction of scholars' research orientation. Through the process of

unravelling the complex interplay at hand, this research attempts to offer nuanced insights into the fundamental mechanisms that influence the scholarly endeavors of scholars. Therefore, this research aims to contribute to the existing literature by bridging the knowledge gap on the intricate link among academic identity, psychological needs, and research orientation, offering significant insights into enhancing research orientation that fosters knowledge creation within academic communities.

Literature Review

Academic Identity

In the academic landscape, which is undergoing a significant transformation in a professional identity rooted in teaching, research, and service; Pifer and Baker (2016) argued that identifying and reshaping academic identity can be a valuable tool for understanding and shaping academic contexts and experiences. This is where scholars require continuous development to manage these changes effectively in both professional and personal spheres. However, higher education institutions prioritize education and research, with individuals primarily expressing their responsibilities as educators or researchers. Therefore, Malaysian higher education institutions, which obviously still hold an essential place in scholar self-development, acknowledge the significance of academic pursuits in promoting research, generating knowledge, and bolstering their reputation within the international academic sphere (Olesen et al., 2020). In order to cultivate a research-oriented environment, efforts are made to cultivate a robust academic identity among faculty members. This encourages them to perceive themselves as individuals who fulfill both the roles of instructors and researchers. Furthermore, academics' identities determine how they portray or categorize themselves into various roles. At the same time, Mackenzie et al. (2018) stated that supporting a specific identity encourages them to keep their identities and actions consistent.

The concept of academic identity, as stated by Saqipi and Rexhaj (2020), involves the process of comprehending one's sense of self as projected against past, present, and future experiences. These experiences can be acquired, modified, and formed through social interactions within academic environments. Academic identity was widely explored in literature, shaping scholars' values and perspectives within their institutions, which promotes their loyalty around their subject area and is related to their specific roles within their institutions (Caldwell, 2022). Academic identity development was found to be fraught with complexities and challenges because of the performative culture in higher education. Besides that, early career scholars' experiences in Malaysian higher education institutions also affected this issue (Adi Badiozaman, 2020). This indicates that the demands represented by the institutional context constantly challenge the formation of a stable identity.

Alfrey et al. (2023) stated that motivation theories suggest that identity indirectly influences behavior. Meanwhile, understanding and theoretical alignments are needed to comprehend this relationship fully. Since scholars identify themselves as researchers, this could encourage their perception of research and encourage their research orientation. To understand to what extent Malaysian higher education institutions, demonstrate a dedication to cultivating their scholars' research orientation through addressing the psychological needs of scholars, the study examines the scholars' satisfaction with their autonomy, competence, and relatedness. According to Cadely et al. (2011), identity styles can promote or hinder scholarly

performance. However, activities among scholars, such as conferences, symposiums, and research forums, likely provide scholars with a platform to showcase their work and articulate their perspectives (Leon & McQuillin, 2018). This could uphold scholar autonomy and allow for research endeavors. Moreover, the communal nature of these occasions could also cultivate a feeling of connectedness and relatedness. Such allocation of resources towards professional development initiatives, specifically in areas such as research methodology, research writing, and publication strategies, provides scholars with the necessary knowledge and competencies to achieve exceptional outcomes in their scholarly pursuits.

Psychological Needs Satisfaction

The Malaysian Ministry of Education has implemented quality control, performance reviews, and prizes to guarantee top standing and global rankings in higher education. This will make the profession competitive and demand high standards for efficiency, performance monitoring, and research quality. This, in turn, will increase pressure on the scholars (Adi Badiozaman, 2020). These encourage higher education institutions to support and motivate scholars to fulfill their psychological needs by enhancing their skills and research capabilities and fostering a competitive atmosphere and community. The issue of insufficient support within the scholars' community is a subject of extensive debate. Investigating academic identity's impact on the psychological needs of competence, autonomy, and social relatedness is anticipated to be significantly relevant for scholars (Meuleners et al., 2023).

According to the Self-Determination Theory, psychological needs motivate human conduct and promote overall well-being (La Guardia et al., 2000). The satisfaction of autonomy, competence, and relatedness is vital for individuals' total motivation and satisfaction, as they are fundamental psychological demands (Dimmock et al., 2022). According to Landon et al. (2020), a person's sense of autonomy must be reflected in their sense of being the source of their activities, where their behavior is deliberate and self-reflective. In contrast, the experience of meaningful interactions with other people, or a sense of communion, fulfills the need for relatedness. On the other hand, the need for competence relates to the sense that one carries out a specific behavior right now or demonstrates control over one's surroundings to accomplish certain goals.

The presumption is that the interaction of competence, relatedness, and autonomy in the academic setting is crucial for developing research-oriented competency. This originated first from the idea that autonomy enhances problem-solving skills and creates an atmosphere that welcomes experimentation and intellectual discovery. This allows scholars to pursue independently and further their research goals. It also encourages scholars' research orientation and enables scholars to engage in innovative and challenging research projects. Moreover, a feeling of belonging and attachment to the scholars' community creates a favorable atmosphere for developing and improving research focus and abilities. Communal competence is observed to manifest as scholars engage in interactions with their colleagues, exchange valuable insights, and address research obstacles. Consolidating relatedness and autonomy is a potent stimulant for advancing research-oriented proficiency in the scholarly community.

Research Orientation

Malaysian universities have significantly improved rankings and citation impact since five institutions were recognized as research institutions in 2007. One of these universities is the University of Malaya, which improved its QS World University Ranking from 167th place in 2014 to 65th place by 2024. This advancement is due to strategic initiatives such as the Malaysia Research Assessment (MyRA) and the Higher Institution Center of Excellence (HiCoE) program, which have significantly boosted research output and quality (Symonds, 2024). This has made Malaysia a leading education center in Southeast Asia, creating a competitive environment for higher education (Adi Badiozaman, 2020). The research orientation of scholars is greatly influenced by the support of the Malaysian government, strategic investments made in research infrastructure, and the promotion of scholar autonomy in their goal of improving the general competency of the scholars' research community. Ooms et al. (2018) revealed that research orientations focus on scientific understanding and consideration for practical applications to advance knowledge, support societal, and economic solutions. At the same time, Jensen and Dikilitas (2023) looked over four (4) components of research-based education: research-led, research-oriented, research-based, and research-tutored. They include learning about recent research, gaining research skills, performing research, and participating in critical discussions.

Research orientation is defined as an academic's perception of being at the forefront of the research profession and the emphasis placed on doing research compared to other academic activities (Albaram & Lim, 2023). Therefore, Ooms et al. (2018) stated that scholars' research career performance is positively impacted by their research orientation depending on the level of scholars' research orientation. It motivates this study to investigate how scholars' research orientation is influenced by academic identity through satisfying their psychological needs. Overall, driven by a strongly ingrained sense of academic identity, the study assumes that Malaysian scholars navigate an environment that supports autonomy and ties them to the scholars' community. It offers opportunities for the ongoing growth of research competence. Thus, it makes a significant contribution to the establishment of research orientation.

The conceptualization of the research model stems from a comprehensive literature review, with a particular focus on academic identity, psychological needs satisfaction, and research orientation, which served as the foundation for developing the research model. According to prior studies (Pifer & Baker, 2016; Saqipi & Rexhaj, 2020), academic identity encompasses scholars' perceptions within the academic setting, including how they feel about their academic community and how much they feel like they belong. Understanding of how these perceptions affect research orientation is shaped by the theory of Self-Determination (La Guardia et al., 2000). Hence, the study theorized that fulfilling the psychological needs of autonomy and relatedness within an academic community is crucial in motivating academic competence and research orientation. Moreover, the study places these characteristics in the context of Malaysian higher education institutions, which have made substantial expenditures and developments to promote a research-oriented atmosphere (Adi Badiozaman, 2020; Ooms et al., 2018). Therefore, the study postulates the following hypotheses and conceptualizes the research model in Figure 1.

H1: Academic Identity significantly satisfies their psychological need for relatedness to their universities.

H2: Academic Identity significantly satisfies their psychological need for autonomy to perform research.

H3: The psychological need for relatedness significantly promotes their competence to perform research.

H4: The psychological need for autonomy significantly promotes their competence to perform research.

H5: The psychological need for competence to perform research significantly promotes their research orientation.

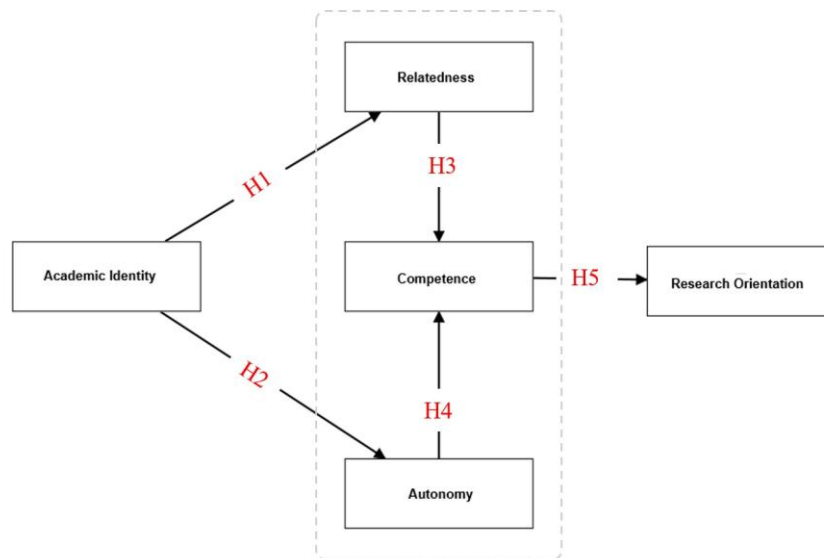


Figure 1. Research Model.

Methodology

Participants Profile

The study aims to explore to what extent the scholars' research orientation is motivated by academic identity through satisfying their psychological needs in Malaysian higher education institutions. Therefore, a quantitative research approach was applied using an online email survey to access more participants due to the fact that Malaysian higher education institutions are spread over the country in several cities. In addition, more than sixty-five thousand academic staff members in Malaysia are spread around 59 private and international universities and 20 public institutions (Ministry of Higher Education, 2022). Utilizing a purposive sampling approach, the study survey was only emailed to 853 scholars whose email addresses were provided by their universities' official websites at top QS-ranked business administration schools. These scholars were specifically selected from a larger pool within top QS-ranked 21 universities involved in academic activities. Out of the surveys sent, 310 were returned with a 36% response rate, after excluding two responses due to outlier issues. The challenge of achieving high response rates is expected in survey research

conducted in Malaysia, as demonstrated by studies such as Nik Ahmad et al. (2019), who reported a response rate of 25%. Omar et al. (2019) also reported a response rate of 17% among academic and administrative staff in Malaysia. Since the study secured the minimum sample size required to achieve sufficient statistical power, which was calculated using power analysis (Erdfelder et al., 1996), the study obtained adequate responses.

Academics who answered the survey comprised 44.5% female and 55.5% male. At the same time, the majority ranged in age from 36 to 55. The respondents comprise 61.6% Malay, 19.7% Chinese, 9.4% Indian, and 9.4% other ethnicities. Table 1. illustrates the demographic profile of the sample. Moreover, the study adhered to the ethical principles outlined by UCSI University, derived from the Declaration of Helsinki. Nonetheless, participants were provided comprehensive information about the study's purpose and procedures, ensuring voluntary participation and preserving their anonymous identity.

Table 1

Demographic profile of the Sample (N = 310)

Characteristic	Gender		Age						Race			
	(1) Female	(2) Male	(1) < 26	(2) 26 – 35	(3) 36 – 45	(4) 46 – 55	(5) 56 – 65	(6) 65 >	(1) Malay	(2) Chinese	(3) Indian	(4) Other
Sample (n)	138	172	0	41	118	121	27	3	191	61	29	29
Percentage (%)	0.445	0.555	0	0.132	0.386	0.393	0.087	0.009	0.616	0.197	0.094	0.094

Measurement Tool

The survey tool employed in this study utilized measurement scales drawn from prior research with due consideration given to the adaptation. This measurement tool uses a six-point Likert scale (1 = strongly disagree to 6 = strongly agree) to avoid including a neutral midpoint with an ambiguous meaning, and encourage participants to provide thoughtful responses (Simms et al., 2019). Four indicators were adapted for gauging academic identity (Chiu et al., 2006). The Academic Identity items together capture the core of academic identity that gauges the academics' sense of affiliation with the university, their perception of unity or closeness within the academic community, their strong positive sentiment towards the academic community, and their expression of pride in being a part of their academic community. An example item to measure academic identity is “I have the feeling of togetherness or closeness in my university community.” An additional set of nine indicators for assessing psychological needs satisfaction was developed by Jennifer G. La Guardia et al. (2000). Examples of items to measure the psychological needs satisfaction of academics' autonomy, relatedness, and competence subsequently are “when I am with my university members, I feel free to be who I am,” “when I am with my university members, I feel a lot of closeness and intimacy” and “when I am with my university members, I feel very capable and effective.”

Moreover, six indicators were selected to evaluate research orientation (Pitout, 2013). A sample item is “I am capable of developing new research ideas which help university

community members.” Six academics assessed the survey's face and content validity, confirming its clarity. The instrument was suitable for our target population since English is an official language in Malaysia and it is widely spoken among universities academics,

Measurement Model

The PLS structural equation modelling using SmartPLS was employed to analyze the data. The PLS approach is a powerful tool to estimate causal pathways and assess direct and indirect effects among multiple formative and reflective constructs, allowing researchers to explore complex relationships from incomplete, unbalanced, or collinear data (Hair et al., 2022; Islam & Ali Khan, 2023). This approach empowers the study to delve deeper into the intricate dynamics of academic identity and its implications for scholars' behavior and research orientation, thereby advancing our understanding of this complex phenomenon in the academic context. The measurement model results revealed that items AU3, CO2, RE2, ORI1, and ORI2 have outer loadings issues with less than 0.70 (0.175, 0.323, 0.312, 0.636, and 0.653) respectively, which were omitted from the analysis. Overall, other indicators hold reliable and valid measurement scales. Table 2. shows the robustness and applicability of the measurement instruments in capturing the intended constructs. The analysis encompasses outer loadings, construct reliability and validity, and discriminant validity of the outer measurement model. Notably, the indicators showcase a robust model with strong outer loadings (OL), a healthy level of independence below the accepted threshold of 5 collinearity (VIF), pivotal markers of measurement model accuracy (Cronbach's Alpha), and robust discriminant validity (AVE). Compared to Hair et al. (2022) criteria, these results affirm the constructs' internal consistency, endorse the accuracy, reliability, and convergent validity, and shed light on the robustness and dependability of the employed measurement instruments.

Table 2

Validity and Reliability Results

Construct	Indicators	OL	VIF	CA	AVE
Academic Identity	ID1	0.891	2.955	0.923	0.812
	ID2	0.898	2.885		
	ID3	0.917	3.694		
	ID4	0.899	3.315		
Psychological Need for Autonomy	AU1	0.936	2.361	0.863	0.88
	AU2	0.935	2.361		
Psychological Need for Competence	CO1	0.911	2.097	0.839	0.861
	CO3	0.931	2.097		
Psychological Need for Relatedness	RE1	0.931	2.238	0.853	0.871
	RE3	0.917	2.238		
Research Orientation	ORI3	0.856	2.464	0.904	0.775
	ORI4	0.858	2.908		
	ORI5	0.876	2.617		
	ORI6	0.864	2.653		

Note, OL= Outer Loadings, VIF= collinearity (variance inflation factor), CA= Cronbach's alpha, AVE= Average variance extracted.

Structural Model

The structural model analysis results, derived from the SmartPLS Version 4, provide a nuanced understanding of the relationships and impacts among the key constructs in the research framework (Ringle et al., 2023). Table 3. presents the results of the structural path analysis, revealing significant results that support all the hypotheses adopted by the study. Specifically, academic identity significantly impacted both relatedness ($\beta = 0.568$, $t = 9.629$, $p = 0.000$, H1 accepted) and autonomy ($\beta = 0.580$, $t = 11.865$, $p = 0.000$, H2 accepted). Relatedness accounted for (33.6), while autonomy accounted for (32.3%) of their variances. However, both relatedness and autonomy revealed statistically significant positive impacts. Both relatedness and autonomy had a considerable influence on competence ($\beta = 0.439$, $t = 5.783$, $p = 0.000$, H3 accepted) and ($\beta = 0.340$, $t = 4.320$, $p = 0.000$, H4 accepted) accounting for (51.8%) of their variances. Furthermore, the results showed that competence significantly positively affected scholars' research orientation ($\beta = 0.417$, $t = 8.237$, $p = 0.000$, H5 accepted), accounting for (17.4%) of its variance.

Table 3

Path coefficients and significance level Results

Hypothesis	(O)	(M)	SD	T	P-values
H1: Academic Identity -> Autonomy	0.568	0.568	0.059	9.629	0.000
H2: Academic Identity -> Relatedness	0.580	0.579	0.049	11.865	0.000
H3: Autonomy -> Competence	0.439	0.436	0.076	5.783	0.000
H4: Relatedness -> Competence	0.340	0.342	0.079	4.320	0.000
H5: Competence -> Research Orientation	0.417	0.421	0.051	8.237	0.000

Note, (O)= Original sample, (M)= Sample mean, SD= Standard deviation, T= T statistics

The R-squared values provide insights into the variance explained by the endogenous constructs. Notably, autonomy ($R^2 = 0.323$), competence ($R^2 = 0.518$), relatedness ($R^2 = 0.336$), and research orientation ($R^2 = 0.171$) all demonstrate substantial explanatory power, indicating the effectiveness of the model in capturing the variability in these constructs. Furthermore, the f^2 values further emphasize the importance of each construct in predicting the endogenous constructs' variance. Academic identity and autonomy have a noteworthy impact on competence and research orientation as reflected in their respective f^2 values. In addition, the importance-performance map illustrates the performance of each construct, with academic identity (76.415), autonomy (72.991), competence (73.684), and relatedness (69.789) highlighting their relative contributions to the overall model. The findings underscore the significance of these constructs in academic settings and provide valuable insights for researchers and practitioners. Table 4. shows the R^2 , f^2 , and importance-performance map analysis.

Table 4

R², F², and importance-performance map

Construct	R ²	IPMA	f ²			
			AU	CO	RE	ORI
Academic Identity (ID)	--	76.415	0.477		0.506	
Autonomy (AU)	0.323	72.991		0.202		
Competence (CO)	0.518	73.684				0.210
Relatedness (RE)	0.336	69.789		0.122		
Research Orientation (ORI)	0.174	--				

Note, R²= R-square, f²= R-square, IPMA= importance-performance map analysis.

Results and Findings

Figure 2. shows the path coefficients, significance level, and R². The path coefficients reveal the strength and significance of the associations between academic identity, autonomy, competence, relatedness, and research orientation. However, the results of the path coefficients for academic identity -> autonomy (0.568) and academic identity -> relatedness (0.580) indicate substantial and statistically significant positive effects. This suggests that a strong sense of academic identity positively influences both autonomy and relatedness among scholars. These findings are consistent with earlier research highlighting the value of autonomy and relatedness in promoting individuals' professional development, expertise, and well-being through organizational and ingroup identities (Chen et al., 2020; Dimmock et al., 2022; Lheureux & Parmentier, 2022; Zheng & Huan, 2022). Moreover, the path coefficients demonstrate the impact of autonomy and relatedness on the subsequent construct of competence, as autonomy -> competence (0.439) and relatedness -> competence (0.340) both showcase positive and significant influences. This suggests that autonomy and relatedness contribute significantly to competence in academic settings.

These findings highlight the critical role that autonomy and relatedness play in motivating the competence and effectiveness of individuals in different settings, which supports and resonates with prior literature (Chen et al., 2020; Ganotice et al., 2021). At the same time, competence -> research orientation (0.417) indicates that higher levels of competence lead to a more pronounced research orientation. Similarly, the path coefficients from relatedness -> competence (0.340) signify that a sense of relatedness positively affects competence. This aligns with the prior research indicating how scholars' and researchers' competencies could promote their research performance reflected by their research orientation (Chen et al., 2020; Ting et al., 2019). These findings contribute to the prior research by providing new insights into academic settings.

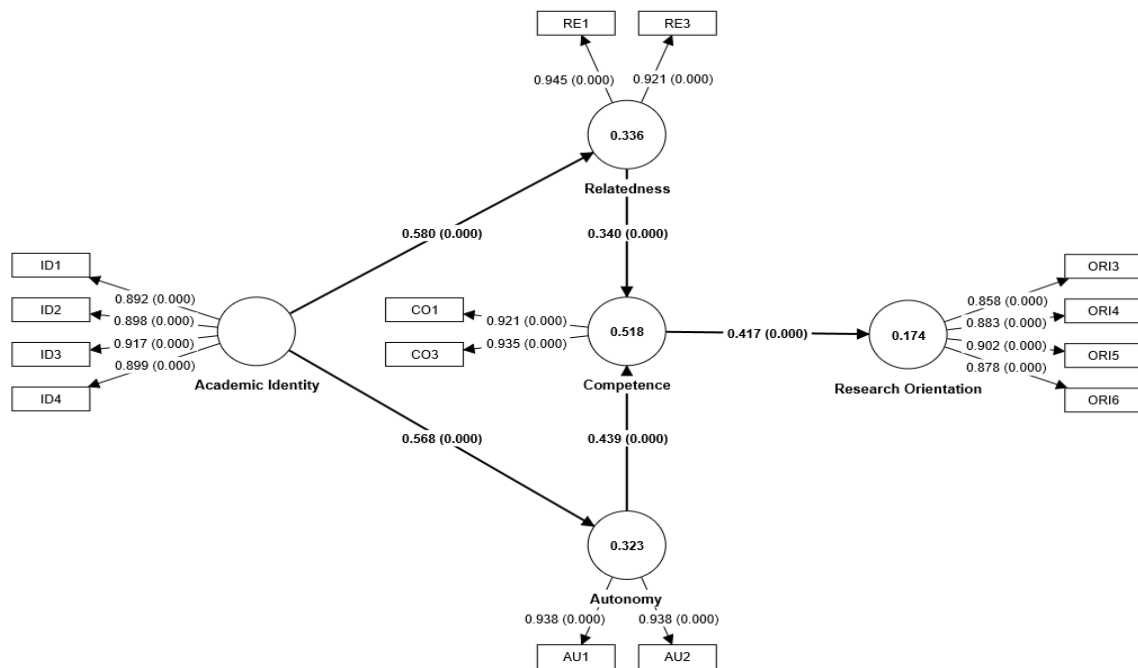


Figure 2. Structural Research Model

The findings imply that a strong sense of academic identity favors relatedness and autonomy, which strongly influences scholars' research inclination that relies on their research competence in academic contexts. This aligns with other research, which highlights the value of relatedness and autonomy in fostering people's professional growth and competence. Furthermore, higher competence levels produce more pronounced research orientation. This emphasizes competence's critical role in determining the research orientations researchers take. These results shed light on the underlying mechanisms guiding researchers' motivations and behaviors and how academic identity impacts researchers' research direction in academic settings.

Conclusion and Implications

The study's hypotheses have been confirmed, and the critical role academic identity plays in directing academic research directions in Malaysia has been highlighted. The study concludes that academic identity, encompassing one's sense of belonging to the academic community, significantly influences academics' orientations toward research work. It makes them more inclined to pursue research that aligns with their academic identity and aspirations. This occurs when academics perceive themselves as competent while feeling integrated within their community and feel autonomous in research endeavors. Therefore, the importance of psychological needs satisfaction in shaping research orientations through feeling supported and empowered to pursue research interests autonomously is likely to exhibit greater engagement and commitment to scholarly pursuits. Overall, these findings contribute to a theoretical understanding of the interplay between academic identity and research orientation, highlighting the significance of psychological factors in guiding researchers' behaviors and motivations within the academic domain, revealing essential implications for the study.

First, policies and institutions of higher learning, on an institutional level, should consider measures that encourage a friendly and cohesive academic atmosphere, giving scholars a feeling of community and shared identity. In addition, initiatives like joint research collaborations, multidisciplinary forums, and mentorship programs that foster deep ties might do this. Moreover, realizing the dynamics of relatedness in shaping research direction on individual and team levels encourages a sense of belonging and teamwork to interact with one another, exchange ideas, and work together to enhance the research culture. Therefore, institutions should organize networking events, research retreats, and collaboration platforms, as these initiatives have been recently founded by Owan et al. (2023) and Yang and Wang (2024) to enhance collaboration and knowledge exchange among researchers, academic staff, and scientists in Nigeria and China. It ultimately contributes to a vibrant research culture within academic institutions.

Second, acknowledging the relationship between the satisfaction of psychological needs and academic identity highlights the significance of relatedness, autonomy, and competence in promoting research orientations and participation. Hence, scholars' institutions can create support systems and interventions that enable faculty members to independently follow their research interests. Furthermore, providing opportunities for professional development and mentorship and acknowledging and rewarding research contributions in promotion and tenure processes can contribute to satisfying competence needs.

Eastern Asian countries often share cultural and societal traits, such as hierarchical structures and collectivist norms, which can affect scholars' autonomy and sense of community. The study findings derived from Malaysia offers insights applicable to similar contexts across the region, which has comparable academic systems and policies, shaped by shared historical and economic backgrounds. The study's recommendations for enhancing research capabilities through supportive environments and tailored policies can be adapted to other Eastern Asian countries.

Limitations and Future Research

The findings of this investigation reveal a pivotal role for academic identity in driving research orientation among Malaysian scholars. This phenomenon manifests when scholars fulfill their psychological need for competence by satisfying their relatedness to the scholars' community and experiencing a sense of autonomy in conducting research. The study provided valuable insights into the dynamics of scholar's research orientation. It is essential to acknowledge certain limitations that may impact the generalizability of the findings. First, the data collection exclusively focused on scholars within Malaysian higher education institutions who participated in the study voluntarily and utilized a cross-sectional study. This specificity allows for a nuanced examination within a particular context, but it limits the broader applicability of the findings to a more extensive and diverse global academic landscape. Second, the literature on the interplay of factors shaping scholars' research orientation, particularly within academic settings, is relatively limited.

Therefore, future research should delve into comparative studies across diverse institutional and cultural settings to bolster the robustness of the study's findings and facilitate broader generalization. Investigating similar variables in varied contexts will contribute to the existing body of knowledge and provide a more comprehensive understanding of the factors

influencing scholars' research orientation. Moreover, future research could qualitatively examine a range of perspectives and recommendations from scholars, scientists, researchers, and stakeholders that aim to customize and enhance cooperative decision-making procedures. This can foster a positive research culture and support a vibrant research environment in Malaysian academia.

This research opens doors for comparative studies across Eastern Asia, helping to develop generalized theories and strategies. While focused on Malaysia, the findings have broader relevance due to the region's cultural and academic similarities. Further research can refine these insights and adapt them to local contexts, enhancing the academic and research landscape across Eastern Asia. In conclusion, while the current study sheds light on crucial aspects of scholars' research orientation, the identified limitations underscore the need for cautious interpretation and pave the way for future research directions. Addressing these limitations through diverse participant inclusion, refinement of measurement tools, and comparative investigations across settings will undoubtedly enrich the scholarly discourse on scholars' research orientation.

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