An Investigation into Academic Identity Development Statuses among Algerian Master Students

استقصاء لرتب نمو الهوية الأكاديمية لطلبة الماستر بالجامعة الجزائرية

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- **Abstract:** Among the variations of identity that attracted psychology and education researchers, are those associated with academic and professional settings, or what is known as Academic Identity (AI). It was commonly recognized that well identified AI is related to students' academic achievement, goal orientation, motivation and success in their academic majors. Since all these aspects are in the core aspects targeted by universities around the globe, AI development is becoming one of the most concerns of university training programs besides knowledge transfer. Hence, this study aims at investigating the statuses of AI development among a sample of 200 Algerian master students within an Algerian university context. The investigation was also conducted through interviews with a number of 25 teachers. This study used academic identity status measure (AISM) developed by the researchers. Most participants' levels of AI development were distributed between achievement, moratorium identities, and Low defined moratorium, while the rest showed foreclosed and diffused levels. A very few students held mid statuses such as; achievement, moratorium, foreclosure or diffusion-orientedlevels. The findings also indicated no significant differences in

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gender or in academic majors, except for sociology branch in the foreclosure status. This study discusses significant implications that spots light on the importance of devoting more consideration, in higher education, to students' AI development as a predictor of their academic career success and continuation.

- **Key words:** Psychology, Educational Psychology, Identity, Academic identity, Higher education.

- الملخص:

من بين تفرعات الهوية التي جذبت عديد الباحثين في علم النفس وعلم النفس التربوي، تلك المتعلقة بالمجالات الأكاديمية والمهنية، أو ما يعرف باسم "الهوية الأكاديمية". أكدت العديد من الدراسات وجود ارتباط وثيق بين مدى نمو الهوية الأكاديمية ومدى النجاح الأكاديمي، توجيه الأهداف، والدافعية للنجاح في التخصصات الأكاديمية. وبما أن هذه الأخيرة شكلت أهم المساعي التي تعمل الجامعات في جميع أنحاء العالم على تحقيقها كان من المهم توجيه الاهتمام إلى توجيه الرعاية الكافية للنمو السوي للهوية الأكاديمية للطالب في جميع مستويات التعليم العالي. ومنه فإن هذه الدراسة تهدف هذه الدراسة إلى استقصاء مدى نمو الهوية الأكاديمية بين طلبة الماستر بالجامعة الجزائرية في محاولة لاكتساب نظرة حول مدى نمو وتطور الهوية الأكاديمية في الأوساط الجامعية الجزائرية. شكل 200 طالب ماستر و25 أستاذا، بجامعة مسيلة، عينة الدراسة، استخدمت هذه الدراسة مقياس رتب الهوية الأكاديمية (AISM) المصمم من طرف الباحثين. توصلت الدراسة أن أغلبية الطلبة توزعوا بين رتبت التحقيق، التعليق والتعليق منخفض التحديد، والرتب البينية أي الميل للتحقيق أو التعليق أما البقية أبرزوا انغلاقا، تشتتا أو ميلا للتشتت في هويتهم الأكاديمية. كما أظهرت الدراسة غياب الفروق الدالة بين الجنسين والتخصص في نمو رتب الهوية الأكاديمية لطالب الماستر ما عدا فيتخصص علم الاجتماع على مستوى رتبة الانغلاق أين ظهرت بعض الفروق بين التخصصات لصالح تخصص علم الاجتماع. تنتهي هذه الدراسة بتوصيات حول ضرورة الاهتمام بنمو الهوية الأكاديمية في التكوين الجامعي للطالب لما لها من انعكاسات على نجاح مسارهم الأكاديمي.

- **الكلمات المفتاحية:** علم النفس، علم النفس التربوي، الهوية، الهوية الأكاديمية، التعليم العالي.

1-Introduction:

Identity development is one of the topics that received considerable attention in social and human sciences alike. Identity research had widely spread out and resulted in new variations when referring to identity, such as; social, personal, national, ethnic, religious, professional, ideological and academic identity. All those variations are identified in terms of their interplay contexts.

Broadly speaking, identity is defined in terms of the traits, the social relations, the roles, and the social group memberships that define who one is (Leary & Tangney, 2012). Since identity is the essential feeling of the self and the result the effective interaction between the person and the values, the beliefs, the norms and the culture within a given society, it can be said that identity development processes that take place within the wider society can happen within its sub-societies. Specifically, academic communities can be seen as one of these sub-societies where students entering a higher education program are exposed to multiple academic activities, cultures and norms to which they are supposed to identify themselves as members by creating a sense of being and belonging or an identity.

Recently, Was and Isaacson (2008) proposed the concept of AI. According to them, it is a special part of "ego identity" and a distinctive aspect of identity development. Although the term "AI" lacks precision in terms of description, some explanations were provided. Higher education researchers generally define it as a formation process that ends up with the development of both the students' academic characteristics, and their social placement within the academic environment (Schulze, 2014). In accordance with this, the process of identity formation is seen as 'finding an own voice' (Potgieter & Smit, 2009), or 'finding the own academic self' within the academic society (Dison, 2004). It can also be described as the individuals' self-perception in academic situations through commitment to values norm and roles within the academic community he/she belongs to (Billot and king, 2015).

The purpose of developing an AI is described as giving the student a feeling of belonging to a given academic community, along with an individual experience of personal academic worth that ensures personal visibility in the academic environment (Pittman & Richmond, 2007). Empirical research on AI, also, highlighted the importance of its development in shaping students' sense of belonging to the university environment which plays an integral role in their wellbeing, productivity and in achieving positive academic self-concept (Jensen & Jetten, 2016). Furthermore, the development of positive AI contributes to self-efficacy, motivation, commitment, and job satisfaction of both educators and students (Schulze, 2014). This suggests that the ease with which university students begin to internalize and enact new AIs may influence whether they persist with their studies, take role in research and become a part of a discipline or simply drop out of it (Baker & Pifer, 2011).

More evidence on the importance of AI development is provided by Schmidt and Hunt (1994) who took it to early university days. They claim that first year college students' psychological development and academic self-perception can have a greater influence on the degree to which they are prepared to participate in college life. Furthermore, it was found that ability to plan and implement effective study strategies are determined by the level to which college students are committed to aspects of their AIs (Lange & Byrd, 2002).

All in all, and given all provided evidence of its importance, AI development can either promote well-being and satisfaction or encourage dysfunctional emotions and withdrawal from studies (Mc Apline & Amundson, 2007). Accordingly, AI is posited as one of the main perspectives beneficial for examining academic practice (Martek, 2008). Therefore, another unquestioned task to consider by higher education program designers is providing appropriate care to ensure students AIs growth since it is one way to promote the outcomes of their programs.

It can be quite evident that developing a well-established academic identity is a complex challenging process. In order to construct their academic identities, students

have to make choices in a complex and a shifting academic landscape of communities, institutional routines, duties, roles and relationships (Schulze, 2014). Therefore, providing assistance to students, at different levels of creating and establishing their academic selves is evident as well.

Hence, an investigation of AI development levels among university students constitutes a significant contribution to the literature. This study, then, opens doors for a more insightful knowledge about what dynamics and factors contribute to the socialization process of university students that ends by the construction and development of an academic self.

2-Problems Statement:

In spite of the importance of developing a sound AI on students' academic careers, little concern is devoted to this component in the Algerian higher education programs. This is clearly transcribed in the poor related literature that includes no reference to research in this area, while research in foreign universities focused on every aspect related to AI using different methodologies and tools (Dison, 2004; Taylor, 2007; Was, Harthy, Oden, & Isaacson, 2009; Vandeyar, 2010;Schulze, 2014; Billot and king, 2015).

The absence of this variable in the Algerian university can be the result of the common focus on the final concrete product of the process of preparing researchers, which is the final paper work presented in the form of a dissertation, a thesis or a training report. Unfortunately, final graduation research project is still viewed as the only proof of students' readiness to survive the ups and downs of scientific research.

On the same vein, another evidence of the absence of concerns towards AI, among both novice and established researchers, can be the poor Algerian scientific research production. In a study conducted by Harouche and Taoualbia (2018), aimed at tracking scientific research production during the last decade, it was found that the Algerian existing research outcome did not exceed 0.12% of the world's academic

research outcome. This little contribution transformed our higher education institutions into knowledge consumers rather than producers. To relate this finding to the concern of this study, we can say that the absence of researchers interested in contributing to their communities of practice by producing creative significant research, and whose focus is only on ensuring the fulfillment of job promotion requirements, can be explained by a problem related to their AI development in earlier or late stages of growth as researchers, given its impact on career endorsement and sustainability.

In accordance with what have been mentioned above, the present study takes the objective of addressing this limitation in related research by exploring AI development levels among a sample of Algerian master students. Master students, as a case of focus, were due to that fact they are at the midway between graduation and post-graduation levels. Precisely, in this level, students have to subsist in a new academic milieu in which the first signs of researchers' AI growth can be traced. Moreover, at master level, students are required to perform several academic tasks and roles such as choosing their research field, conducting a research, preparing a final graduation project and establishing their first footage in a given research major. They also have to convey to academic and institutional norms that organize their research activity, such as; academic writing norms, supervisory routines and thesis submission norms. This academic novice activity constitutes a challenge to their AIs and plays a key role in determining their continuation /cessation in their chosen fields of interest.

3- Research questions:

In Accordance with the stated problem and guided by the researchers' interest and objectives a number of questions were asked:

- What are AI statuses among Algerian Master students?

- Are there differences between male and female master students in developing AI?

- Are there differences between academic majors in developing AI?

4- Hypotheses:

This study hypothesizes the following:

- There are no statistically significant differences between male and female master students in the four statuses of AI.
- There are no statistically significant differences between academic majors in the four statuses of AI.

5- Literature Review:

Reviewing the literature related to AI development, it can be deduced that most attempts investigated mechanisms of development of novice and experienced researchers, during many stages of their careers, in terms of many features including; learning experiences, roles, duties, socialization processes, social networks, supervision relationships, academic writing practices and professionalism.

Taylor (2007) investigated how learning to become a "researching professional" is understood by students undertaking a professional Doctorate of Education in one of the U.K universities. The study was designed within a phenomenological and descriptive/interpretive paradigm using case study methodology. Data was collected using semi structured interviews with 12 students. In this study, three ways of understanding learning to become a "researching professional" were identified: conformity, capability, and becoming and being. Each is characterized by an internal relationship between how the learning context, research, and professional identity are understood. Although no generalizations are made from this study, it may be useful to others in similar contexts as it highlights implications for university tutors regarding students developing academic and professional selves.

Was and Isaacson (2008) took another perspective that ended up by designing their Academic Identity Statuses Measure (AIM). Their focus was on the levels of AI development among university students. Inspired by Marcia's ego identity status paradigm, Was and Isaacson (2008) proposed four AI statuses: Achievement,

Foreclosure, Moratorium and Diffusion on the basis of commitment to and exploration of academic choices, experiences, values, norms, relations and roles. They also suggested two dimensions for academic identity which are social and ideological.

Using the AIM developed by Was and Isaacson (2008), in another study by Was et.al (2009) was aimed to determine the relationship between AI level and both achievement and goal orientation. The data were collected from 407 undergraduate students and submitted to correlation and path analysis to examine the relationship between the three constructs. In this study Was et.al (2009) confirm the impact of students' transition from different educational levels, as they meet new institutional norms and values and subject their identities to negotiations and transformation, on their academic achievement and goal orientation.

In a study investigating AI growth and perception within modern changing institutional values and traditions, Billot (2010) directs attention to researcher's main concerns when it comes to their self-conception during every stage of their academic careers. She pointed to questions such as "what makes an academic today and how does the academic perceive his/her working identity?". Such an investigation supports AI research by directing attention to concerns, perceptions and tensions lived by researchers when establishing an AI.

Vandeyar (2010) tried to explore how academics construct and negotiate their identities within the world of the academe and track identity construction processes. Using narrative inquiry method through the collection of students and academics experience narratives that emphasized the diversity of their identities that were negotiated with others within personal, historical and situational contexts, this study revealed that that through the different forms of community participation and identification academics come to create an academic self. It also identifies what influence power relations have in promoting or negating their sense of academic self.

Drawing on self-study of three doctoral students' experiences, Foot, Crowe, Tallafield and Allan (2014) tried to comprehend how scholarly identity development

is perceived. According to Foot et.al (2014) upon entering a higher education program such us the doctoral program, students are exposed to multiple academic and scholarly cultures and begin to undertake a number of identity transitions concurrently where they strive to develop the identities of a university/doctoral student, a scholar and member of the academy, and an affiliate of a particular discipline.

Attempts to understand and track AI development spread out across different universities and contexts around the world. Schulze (2014), in a study conducted in South Africa by means of a narrative enquiry research approach using eight interviews with doctoral students plus three narratives. From the analysis of the content of the interviews and narratives, three major themes emerged; socialization into the language and values of a stable disciplinary and/or institutional community of practice; internal—external dialectic of identification and self-definition to find meaning and build self-esteem, and role-taking and role-conflict.

In another creative attempt by Billot and King (2015), Metaphors were used tools to collect data about AI of both novice and experienced academics. The investigation was carried through the analysis of their diaries and journals focusing on metaphors created by them when describing their self-perception and socialization experiences. This study ends up recommending greater openness to personal and psychological components in preparing new academics for their academic careers.

Studies focusing on gender differences in AI development levels were almost missing. The first investigation that highlighted the differences was a study conducted by Hejazi, Lavasani, Amani and Was (2012) with 301 high school students. The aim of Hejazi et.al (2012) was to determine the relationship between AI status, goal orientations and academic achievement. Their results showed that AI status related to goal orientations and academic achievement. Males were more likely than females to have diffused and foreclosed AI. Females also showed much greater motivation and

engaged in academic area more than males. Hejazi et.al (2012) recommended the focus on understanding the relationship between AI and academic success in transition from high school to university.

Drawing on the findings of all the mentioned studies and inspired specifically by Was & Isaacson's (2008) work, the present study, as a first attempt in the Arab and the Algerian context, investigates AI four statuses Achievement, Foreclosure, Moratorium and Diffusion. Unlike Was & Isaacson (2008) suggested dimensions of development, this study suggests four main dimensions; ego identity which refers to students self-academic image and objectives, ideological which refers to their personal opinions concerning social, political and academic issues, social which refers to their roles and relations with teachers, colleagues and other researchers; and professional identity which refers to their career choices, self-evaluation, and career plans. The four dimensions are deduced from the data collected out of a small-scale pilot pre-investigation conducted with a sample of master students and teachers using semi structured interviews.

6- Method:

6-1-Method and Sampling:

The descriptive method was adopted since it is the most appropriate one for the purposes of this study. The main body of research data was collected from the responses of 200 master one and two students from four disciplines; social sciences, psychology, Arab literature and English language at M'sila University. 50 students, out of the whole sample, along with 25 teachers were used for the small-scale pre-investigation conducted to understand academic identity components and dimensions within the Algerian university context.

Distribution of the remaining 150 participants of the main study according to academic major (specialty) and gender are displayed on table 1 below.

Table1. Distribution of Participants According to Academic Major and Gender

Specialty								Gender			
English Language		Psychology		Social sciences		Arab Literature		Male		Female	
Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
44	29.3	38	25.3	36	24	32	21.3	71	45.3	79	54.6

6-2- Research Tools:

The main research tool used is Academic Identity Status Measure (AISM) developed by the researchers. The AISM is a 84 items questionnaire measuring the four academic identity statues that were suggested by Was and Isaacson (2008) Achievement, Foreclosure, Moratorium and Diffusion. Table 2 below represents the structure and items of the AISM.

Table 2. Structure and Distribution of the AISM Items.

Sections	Statuses	Items	Sections	Statuses	Items
Achieved status	Self ID	21	Moratorium statues	Self ID	21
	Social ID			Social ID	
	Ideological ID			Ideological ID	
	Professional ID			Professional ID	
Foreclosed status	Self ID	21	Diffuse status	Self ID	21
	Social ID			Social ID	
	Ideological ID			Ideological ID	
	Professional ID			Professional ID	

From table 2, the AISM constitutes four main subscales that target the four AI statuses; each subscale is composed of four sections that represent the four dimensions of identity (ego, ideological, social, and professional).

The AISM was developed first, after reviewing the related literature and theoretical background to Identity development. Then, the four dimensions and their related items were the result of the small-scale pilot study that used mainly semi-structures interviews and focus groups with 50 students and 25 teachers.

Reliability of the AISM was tested using many techniques including face validity, Cranach's Alfa (α=0.94 for the whole scale, α=0.94 Achieved subscale, α= 0.88 foreclose subscale, α=0.92 Moratorium subscale, α=0.94 diffuse subscale), and the split half technique (Guttman split half coefficient=0.90 indicating a higher reliability level). AISM validity was tested using internal consistency technique by means of Pearson Correlation Coefficient (r values ranged from r=0.35 to r=0.83 between items and statuses they belong to, at the levels p=0.01 and p=0.05, and ranged from r=46 to r=0.79 between test sections), and construct validity using correlations with external valid tests including; motivation to learn test by Yahia (2009), motivation to achieve test by Aliche (2016), and Cooper Smith's self-esteem scale.

7- Data Analysis and Discussion

As a first step in analyzing participants' levels of AI, statuses intervals were specified by counting the limit scores of each status. The limit scores were counted using the sum of the mean (M) and the half value of standard deviation (St.d) obtained from participants' scores from each subscale. Subsequently, participants' AI statuses were determined, first, by counting their scores in the four subscales of the AISM (achievement, moratorium, foreclosure, diffusion), then comparing them to the status's intervals. Pure statuses, mid-statuses and excluded answers were determined according to scores obtained. Table 3 represents a description of the criteria of measuring the exact identity status.

Table 3. Description of Different Identity Statuses Measurement

Identity Status	Description
Pure status	When a student scores the limit/interval score or more in one identity status
Mid-status	When a student scores the limit/interval score or more in two identity statuses, the highest scores is selected to indentify the direction e.g. orientation to achievement
Low definition moratorium (LDM)	When a student does not score the limit/interval score or more in any identity status
Excluded responses	When a student scores the limit/interval score or more in more than two identity statuses

As explained in table 3, excluded responses are responses that scored the interval score (limit score) in more than two subscales as the result of carelessness, incomprehension or inaccurate answers. Those who did not achieve the limit score in the four statuses belong to low- definition moratorium. In case of achieving two high scores in two statuses by one participant the appropriate status is determined by the highest score among the two. The resulting statuses indicating levels of AI development among the participants are represented in table 4 below.

Table 4. Distribution of Academic Identity Statuses among the Participants

| Status	Achievement	Moratorium	Foreclose	Diffusion	Achievement Oriented
Freq	32	27	18	15	11
%	21.3	18	12	10	7.3
Status	Moratorium Oriented	Foreclose Oriented	Diffusion Oriented	LDM	Excluded
Freq	5	6	3	23	10

| % | 3.3 | 4 | 2 | 15.3 | 6.7 |

From table 4, 6.7% of the participants were excluded. The rest of the students (140) held different AI statuses. It was found that 21.3% of the participants hold achieved identity meaning that they hold clear visions about their academic roles, relations, duties and future plans as researchers who belong to a given discipline, they also have clear ideologies and points of view (Was et.al, 2009). Achievement oriented students were 7.3% of the whole sample indicating that those students are about to achieve their academic identities, yet still did not develop a clear vision about their choices and still in a process of exploration. Moreover, 18% of the participants are in the moratorium status being undecided and still exploring options concerning their roles, plans and objectives (Was et.al, 2009). Another 15.3% of them are in the phase of low defined moratorium stage which means that they are swinging between different statuses and living a crisis of commitment and exploration of new choices and possible experiences, it also means that these students may not be able to reach a level of stability in their AI. This may result into a confusion and hardship in establishing a clear vision about the self and the future orientations, and then lead to dysfunction and failure. It is, hence, worth saying that these students may be in need for assistance and guidance in identifying themselves and achieving fully defined AI.

Furthermore, as illustrated on table 4, a number of 18 students show a foreclosure status and 6 are oriented to it, indicating that only a few tend to rely on others and simply adopt goals, values and opinions prescribed for them (Was et.al, 2009). This phase of identity development is marked by the absence of analysis of options and choices available and the tendency to look for ready-made prescriptions concerning any academic decision.

As for the last status of AI, both diffused and oriented to diffusion identities constituted 12% of the whole sample. These students have not experienced both commitment and exploration crises which means that they are not ready or willing to

accomplish an academic career. For most of them the main objectives of carrying on a master degree are any options but establishing a research career. This is confirmed from findings highlighted in the pilot study, with both Master students and teachers, as most of them indicated that the objectives of many students is obtaining an academic degree certificate that may serve them someday in their job applications, or simply following the fashion of many other students.

Figure 1 below is a clearer illustration of how master students AI statuses were distributed among the sample of the study.
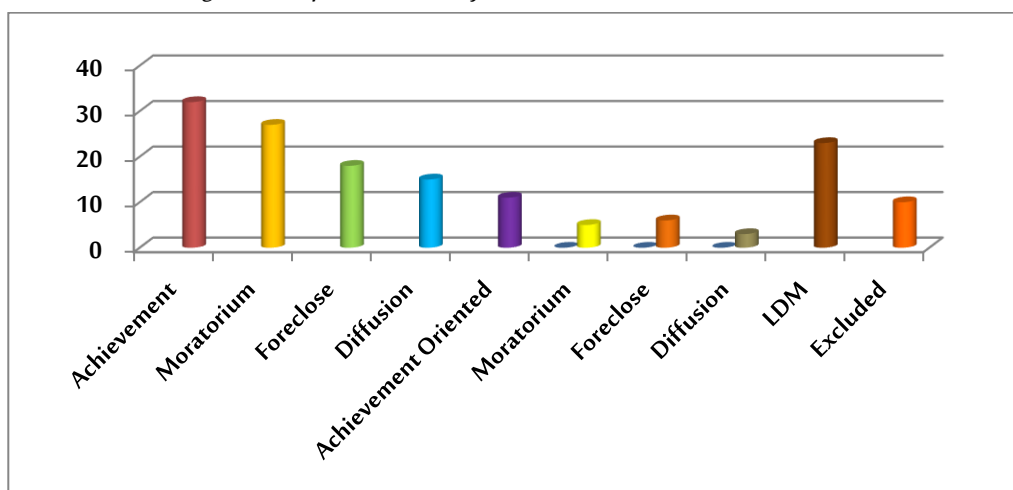
Figure 1. Distribution of AI Statuses among the Participants

Figure 1 depicts the higher frequencies that achievement, moratorium and low-definition AI statuses received. It also depicts the lower frequencies received by mid-statuses; moratorium oriented, foreclosure oriented and diffusion oriented. All in all, it is clearly displayed that the majority of Master students selected for this study hold achieved and moratorium identities, and that a good number of them are still experiencing exploration and commitment crises not being able to settle down and establish a clear AI.

Findings from the first research question indicating that most students are situated in achieved AI or closer to it in the moratorium stage, since it is a preparatory

phase to achievement stage, reveal the effectiveness of the provided training programs offered by the faculties and departments of the selected majors (social sciences, Arabic literature, psychology and English language) in promoting the establishment of Master students' academic selves and in preparing them for further research careers. The number of students in the moratorium stage also suggests the variety of provided options and opportunities as well as academic experiences students are living within their institutional contexts, which is an indicator of the richness of the Master training programs. Yet, the number of students in low definition moratorium suggests the absence of guidance or assistance to students to help them through the journey of establishing an academic self. This, calls for more concern about tutorship provision to students even in master levels.

As for the second research question investigating the differences between the levels of AI, difference analysis was conducted using T-test for independent samples. First difference analysis was between males and females' levels of academic identity development. Table 5 displays the values of T -test of the four AI statues.

Table 5. Difference Test between Males and Females in AI Four Statuses

///	T	df	Sig	Mean Diff	Std. Err DiFF
Achievement	-1,56	138	,12	-6,14	3.94
Moratorium	1,09	138	,27	3.90	3,56
Foreclosure	-,20	138	,84	-0.80	4.06
Diffusion	,12	138	,90	,48	3,89

From table 5, examining insignificant values of T-test of the different AI statuses (t= -1.56, 1.09, -0.20, 0.12) at the degree of freedom (df=138) and levels p (p =0.12, 0.27, 0.84, 0.90) which are all more that the level of significance of p (p > 0.05). Since is more than 0.05 (p> 0.05), we can reject the alternative hypothesis and accept the

null one that confirms the absence of statistically significant difference between males and females in the different stages of AI development. This finding reveals the absence of the impact of gender on developing an AI among participants of this study.

This finding contradicts with findings of studies whose concern was on personal identity growth in general and some studies that investigated gender differences in AI development specifically. Most gender studies confirm the differences between males and females in many aspects including; psychological, mental and physical traits. Moreover, most personality and identity research confirmed the advancement of females over males in achieving full ego identities (Marcia, 1966).

Unlike the findings of this study, and in the only similar study, Hejazi, et.al (2012), recorded a gender difference in the foreclosure and diffusion stages. In view of that, and given the few studies exploring gender differences in university students' AI growth, it is worth noting that this makes the present study and Hejazi et.al (2012) the only existing investigations in this topic. This, also suggests that the absence of difference in academic identity development in this study can be explained within the frames and limitations of this study including the limited sample (150 students) and the limited academic branches. Consequently, there is an emergent need for further AI development gender differences studies.

The last question was about the differences between academic majors in the four statuses of AI development. To test the hypothesis, the ANOVA analysis between several groups was conducted. The following table 6 displays the findings of the analysis.

Table 6. ANOVA Analysis of Differences in Academic Identity Statues among Academic Majors

////		Sum of Squares	df	Mean Square	F	Sig.
Achievement	Between Groups	708,10	3	236,04	,50	,68
	Within Groups	63670,86	136	468,17	///	///
	Total	64378,971	139	///	///	///
Moratorium	Between Groups	1097,100	3	365,70	,98	,41
	Within Groups	50983,643	136	374,88	///	///
	Total	52080,743	139	///	///	///
Foreclosure	Between Groups	4149,030	3	1383,01	2,98	,03
	Within Groups	63069,388	136	463,75	///	///
	Total	67218,421	139	///	///	///
Diffusion	Between Groups	2848,725	3	949,58	2,20	,09
	Within Groups	58663,696	136	431,35	///	///
	Total	61512,421	139	///	///	///

From table 6, the values of F of the Achievement level (F=0.5), Moratorium level (F=0.98) and Diffusion level (F=2.20) are not statistically significant since their levels of significance are more than (p>0.05) (sig= 0.68, 0.41, 0.09). This means that we

accept the Null hypothesis indicating the absence of differences between different academic majors in the three statuses, and hence rejecting the alternative hypothesis. The only significant difference was found between academic majors in foreclosure status where the value of F (F=2.98) was significant at the level of p= 0.03 which is less than 0.05 (p<0.05), thus, the Null hypothesis is rejected and the alternative one is accepted revealing the existence of a statistically significant difference between academic majors in the Foreclosure status.

For further details about the existing statistically significant difference between students from different academic majors in AI foreclose status, the Post HOC multiple comparisons analysis of variance was carried out as summarized on table 7 below.

Table7. Post HOC Multiple Comparisons Analysis between Academic majors

(I) Specility	(J) Specility	Mean Difference (I-J)	Std. Error	Sig.
English	Psychology	-5,84648	4,09472	,156
	Sociology	-22,52941[*]	7,96392	,005
	Arabic	-3,86275	9,09652	,672
Psychology	English	5,84648	4,09472	,156
	Sociology	-16,68293[*]	8,32340	,047
	Arabic	1,98374	9,41285	,833
Sociology	English	22,52941[*]	7,96392	,005
	Psychology	16,68293[*]	8,32340	,047
	Arabic	18,66667[*]	11,63009	,011
Arabic	English	3,86275	9,09652	,672
	Psychology	-1,98374	9,41285	,833
	Sociology	-18,66667[*]	11,63009	,011
*. The Mean Difference Is Significant at the 0.05 Level.				

From table 7 above, it seems clearly that the differences in foreclosure statues were found, specifically, between social sciences students and the students from English language, Arabic language and psychology branches since the differences between the three pairs were significant at the level of $p < 0.05$.

It was also found that all the differences were for social sciences' students, a finding that would lead to suggest that students from social sciences tend to hold foreclosed identities more than psychology, English and Arabic languages' students. This finding implies their possible dependence to rely on available instructions, suggestions and options. This also suggests their absent openness to discovery and commitment. Furthermore, this finding may also reveal possible conclusions about the intuitional routines, teaching and training practices or the nature of presented programs that may encourage dependence and limit openness to explore new opportunities and choices.

8- Conclusion:

Upon entering a higher education program, let it be License, Master or doctoral program, students are exposed to multiple academic and scholarly norms, routines, roles and cultures that will lead to inevitable identity transitions. Old identities are negotiated and new ones are created to fit in the academic sphere. AI identity formation can undertake different stages or statuses on the basis of the two factors discovery and commitment. It can have an influence on students' academic achievement, goal orientation and future academic careers. Consequently, it is crucial to track and assist students through their identity transitions in any stage and exactly in master and doctoral stages where clear goals and orientations towards research can influence research careers.

Based on identity development theoretical background and related literature, coupled with the findings of the present study using a self-report scale that holds different dimensions of master students' AI that were identified by students themselves talking about their experiences, we attempted to point to the importance

of investigating development stages that students go through to achieve their academic selves. All the discussed findings are presented and discussed for the first time in this study because of the noted limitation in this area's related literature, thus, making this study the first in the Algerian context.

By exploring the different AI statuses and then analyzing differences between gender and academic majors, this study raises master teachers, program designers and faculty awareness of the importance of paying attention to AI growth when creating contents, as well as experiences to socialize master students to the academic world and to assist them in their safe transitioning to mature scholars. Furthermore, tracking AI development may be a highly significant reference to assess the extent to which provided training programs, tutorship assistance is really helping in developing sound AI, and thus, promoting them and providing better chances for students to create a well-established academic self.

Ultimately, this study ends up by calling for more concern to identity variable in the Algerian higher education system and less focus on the final graduation concrete written research products since they cannot be a valid proof of student researchers' readiness to the world of academe.

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