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An Exploration of Graduate Learners' Academic Attributions: A Case Study from Higher Education Context

Lisansüstü Öğrencilerinin Başarı Atıflarına Yönelik Bir Araştırma: Yükseköğretim Bağlamından Bir Durum Çalışması

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ABSTRACT

The purpose of the study was to investigate graduate students' attributions to their academic successes and failures. Apart from quantitatively-oriented studies, qualitative techniques in gathering and analysing data were used to make an in-depth interrogation of the representations of causal attributions of the participants to their academic failures and successes. Causal attributions of the participants were examined through Weiner's model of attribution in terms of four aspects as ability attributions, effort attributions, chance attributions and attributions to specified contextual factors. Intentional social interactions were found to be an external executing functioning in modifying the participants' attributional orientations to successes and failures. Moreover, it was found out that individually developed adaptive strategies may turn externally-oriented attributions into internal causal attributions. Idiosyncraticness of attributional reasoning styles was the determinants of the participants' attributional tendencies and learned helplessness behaviour was seemed as an associated component of attributional orientations of the participants.

Keywords: Theory of attribution, Academic failures, Academic successes, Higher education

ÖZ

Bu çalışmanın amacı lisansüstü düzeyde öğrenim gören öğrencilerin akademik başarı ve başarısızlığa yönelik atıflarının incelenmesidir. Nicel yönelimli araştırmalardan farklı olacak şekilde, bu çalışmada katılımcıların akademik başarı ve başarısızlıklarına yönelik nedensel atıflarının derinlemesine belirlenmesi için nitel teknikler veri toplama ve analiz süreçleri için işletilmiştir. Katılımcıların nedensel atıfları Weiner'ın Atıf Modeli'nin temel dört yönü olan beceri atıfları, çaba atıfları, şans atıfları ve bağlamsal atıflar aracılığıyla incelenmiştir. Kasıtlı bir şekilde organize edilen sosyal etkileşimler katılımcıların başarı ve başarısızlığa yönelik atıflarını değiştirmede önemli bir etmen olarak bulunmuştur. Ek olarak, bireysel olarak geliştirilen, uyumlaştırıcı stratejilerin başarı ve başarısızlığa yapılan atıfları dışsal bir eğilimden içsel bir eğilime çevirebileceği tespit edilmiştir. Kendi şahsına münhasır atıfsal akıl yürütme stillerinin, katılımcıların atıfsal eğilimlerinin belirleyicileri olduğu ve öğrenilmiş çaresizliğin katılımcıların atıfsal yönelimleri ile bileşen bir parça olduğu bulunmuştur.

Anahtar Sözcükler: Atıf teorisi, Akademik başarı, Akademik başarısızlık, Yükseköğretim

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INTRODUCTION

Human beings are inherently motivated to make sense of the occurrences. Accordingly, Weiner (1985, 2010) accounted for why and how individuals tend to attribute the reasons of the occurrences to different causes. In order to explain that type of human behaviour's nature and complexity, Weiner (1992) theorized Attribution Theory (AT) and AT has been conceived as a motivational construct acclaiming individuals' causal attributions for perceived causes of events may be influenced, for instance, their prior experiences, social circumstances and cultural norms (Weiner, 1985, 2010). Indeed, as Pintrich and Schunk (2002) proposed, AT evaluates individuals as naive scientists who have efforts to analyse their environments in general, and comprehend their own actions and behaviours of others in particular. The current study was undertaken by taking fundamental assumptions of AT into account particularly in terms of academic success and failure.

THEORETICAL FRAMEWORK

Attribution Theory

Weiner (1985) identified five qualitatively distinctive, but interrelated, components to elaborate the attribution model. These components are interacting in nature (Pintrich & Schunk, 2002; Weiner 1986, 2000) and categorized as antecedent conditions; perceived causes of events, causal dimensions, psychological consequences, behavioural consequences (Pintrich & Schunk, 2002). The current study deals with *perceived causes of events* and *causal dimensions* of individuals' attributional tendencies regarding their *academic successes* and *failures*. To advocate, AT is a cognitive theory of motivation and has utility value in educational settings in uncovering learners' attributional reasoning concerning their school successes or failures (Pintrich & Schunk, 2002; Weiner 1986, 2000).

Weiner (1985, 2010) differentiated individuals' attributions through constructing three dimensions as *locus of control*, *controllability*, and *stability* (see also Table 1). The locus of control dimension signifies for one's judgment's internality or externality (Pintrich & Schunk, 2002). For instance, on one hand, an individual may attribute the school success to his or her ability or efforts that may be internally regulated and adjusted. On the other hand, one perceives other causes of the *same success* such as task difficulty, teacher's assessment criteria, or grading system of evaluators or luckiness. These instances confirm the external aspects of the individual-led success attributions. One of the second properties of causal dimensions, the stability, signifies whether the attribution is stated as permanently or temporarily. In instructional settings, for instance, academic ability and instructional contexts might be perceived as stable factors whereas academic efforts, chances or luckiness can be changeable over time.

As a third property of causal dimensions, as Pintrich and Schunk (2002) and Weiner (1986) explicated, controllability implies that occurrences may have causes either controllable (i.e., one's effort to perform a task) or uncontrollable, (i.e., task difficulty, luck, context, teacher effect).

Furthermore, Weiner (1985, 2010) elaborated AT by certifying some other common attributions that were differentiated from the aforementioned three facets of causal dimensions. The quadrant of Weiner's model alludes that perceived causes of events may also incorporate both academically-oriented and general attributions such as ability, effort, luck, task difficulty, teacher, mood, health, fatigue, etc. In the current study, ability, effort, luck and some contextual determinants were explored as the perceived causes of events.

Theoretical Underpinnings and Justification of the Study

In the related literature, there have been various studies certifying AT's methodological and theoretical instrumentality in diverse instructional contexts:

- Studies on the linkage between *academic achievement* and *learners' attributions* (e.g., Nathawat, Sighn & Sighn, 1997; Cao & Bishop, 2001; Drew & Watkins, 1998; Swinton, Kurtz-Costes & Rowley, 2011),
- Investigations on the linkage between *gender* and *academic attributions* (e.g., Chedzoy & Burden, 2007; Hui, 2000; Hyde, 2005; Lloyd, Walsh & Yailagh, 2005),
- Influences of the *age differences* on academic attributions (e.g., Flammer & Schmid, 2003; Folmer, et al., 2008;),
- Studies on *classroom management* and *teachers' attributions* for students' maladaptive behaviours or students' attributions for their teachers' pedagogical actions (Lambert & Miller, 2010; Poulou & Norwich, 2000; McPherson & Young, 2004; Kee-Tony, 2003),
- Explorations on *academic cheating* attributions of students (Murdock, Beauchamp & Hinton, 2008), academic motivation of pupils and their attributional reasoning (Graham, 1997),
- Studies on the linkage between *self-regulation* and *attributional beliefs* (Masui & De Corte, 2005),
- Examinations on the influences of the attributional retraining programmes on the students' and teachers' attributions (Hall et al., 2004; Chan & Moore, 2006),

Table 1: Dimensions of Theory of Attribution

	Internal		External	
	Stable	**Unstable**	**Stable**	**Unstable**
Uncontrollable	Ability	-	Task difficulty	Luck
Controllable	-	Effort	-	-

- Inquiries on the attributional reasoning in terms of *cultural diversity* (Kivilu & Rogers, 1998; Wolleat et al., 1980).

These studies confirmed the fact that learners' attributions may be overly externally-oriented with a pessimistic orientation particularly for their academic successes and failures. However, when a learner's attributions are readjusted in the line with internally-oriented factors (i.e., self-effort), further decisions and accompanied actions may considerably be turned into optimistic tendencies.

For academic attributions, externally-oriented ones may be related with "learned helplessness" behaviour whereas effort attributions may be associated with "persisting" in performing a task and boosting the further efforts of a person in attaining the given tasks (Cheung, 2000; Swinton, Kurtz-Costes & Rowley, 2011). This also implies an interaction between the academic achievement attributions and accompanied actions. When academic attributions are pervasively externally-oriented, more pessimist scenarios may be drawn upon by learners. For an instance sequence, once a learner failed a task; she may think that it might be due to the difficulty of the task. Then, she would be liable to renounce boosting future efforts to achieve the given task. Presumably, she would be unsuccessful, since; prejudicially she assumes that she would be unsuccessful in any case.

As a consequence of the aforesaid chain, she would be pleased by "self-serving bias" (Albaili, 1998; Mezulis et al., 2004; Miller & Ross, 1975). Self-serving bias is a cyclical motivational process regarding attributional reasoning: once the failure comes, then, external attributions are proliferated; and the person estimates her future failures and causing actions for the failure, ultimately, she ensures her future failure by her deliberate ill-structured actions (Arkin, Appelman & Burger, 1980; Blaine & Crocker, 1993; Campbell & Sedikides, 1999; Kudo & Numazaki, 2003; Mezulis et al., 2004). As a whole, self-serving bias is substantially associated to the locus of control dimension (Mezulis et al., 2004; Miller & Ross, 1975).

Attribution theory has also been expositional regarding "learned helplessness" and "self-fulfilling prophecy" behaviours (Merton, 1948; Wineberg, 1987). Moreover, these actions are more of an issue of uncontrollable and stable attributional typologies (Chan & Moore, 2006; Paris & Paris, 2001; Zimmerman, 2000). When learners make uncontrollable (i.e., difficulty of exam questions) and stable (i.e., teacher's assessment criteria) attributions to their successes and failures, instead of more controllable (i.e., effort, ability) and unstable ones (chance, luckiness), it becomes more drastic to cope with learned helplessness cases (e.g., Chan & Moore, 2006; Peterson, Maier & Seligman, 1993; Seligman, 1975). Learned helplessness may also cause less future motivation to handle a work or boost effort to achieve a given task (e.g., Obach, 2003; Zimmerman, 2000). To explain, a learner may learn being unsuccessful; ultimately, this process may be inextricable as she had lost whole controlling, monitoring and regulating mechanisms of the occurrences (Seligman, 1974, 1975; Sellers & Peterson, 1993). With this hopeless projection, s/he defines the situation as authentic (even though it is only fiction); they would be a concrete reality in the sense their consequences confirming *self-serving bias*.

Apart from abovementioned studies, graduate learners' attributions' nature and complexity were explored in their naturalistic setting in the current study regarding two AT quadrants: *perceived causes of events* (i.e., attributions for effort[1], ability[2], chance[3] and two contextual factors[4] as in the form of complexity of courses[a] and simplicity of assessment and evaluation approaches) and *causal dimensions* (i.e., locus of control[1], stability[2] and controllability[3]). To justify, even though there are several studies researching into cultural and social influences on the failure and success attributions of individuals, only a few studies explored how graduate learners' attributions are inherently associated with their experiences on the academic achievements or failures (e.g., Cheung, 2000; McClure et al., 2011; Perry, Hall & Ruthig, 2007; Perry et al., 1993; Pintrich & Zusho, 2002).

Moreover, quantitatively-oriented studies have dominated the current research's methodology and this research tenet may not ensure to depicture the in-depth aspects of motivational constructs such as attributions (Chesebro & Borisoff, 2007). In other words, for numerous studies which are conducted in the line with quantitative approaches, only self-reported questionnaires were easily administered to reveal attributions in a more generic style as a limitation of these studies (Chan & More, 2006; Drew & Watkins, 1998). In the current study, it was aimed at drawing out a holistic portray of the graduate students' academic attributions regarding perceived causes of events and causal dimensions through a fine-grained qualitative analysis. The research questions of the study are that;

1) In what ways and to what aspects graduate learners represented their attributions regarding perceived causes of their academic successes and failures?

2) Which causal dimensions were more prominent in estimating the graduate learners' attributions to their academic successes and failures?

METHODOLOGY

Participants

By conducting convenience typology of sampling (Miles & Huberman, 1994) the participants of the study were selected as two graduate students, with pseudonyms as Roger (26 years old, male) and Wendy (24 years old, female). The participants have been in the process of gaining their master degrees recently. They have been enrolled in a well-known state university's faculty of education in Turkey, within the bounds of the capital city. Wendy has been at the department of Computer Education and Instructional Technology whereas Roger has been enrolled in Elementary Science Education. They have been planning to be major researchers (PhD) in their departments. In detail, Wendy has studied on computer-supported collaborative problem solving, human-computer interaction, usability and eye-tracking those are considered as special topics in her field, whereas Roger has conducted his

studies regarding planned behaviour theory. The participants have been perceived as pretty successful students by their classmates and scholars, as they had been ranked in the first orders by being accepted for the postgraduate program of the university.

Research Design

A basic qualitative approach was used to capture how the participants have experienced the reasons of the occurrences that are related with their academic successes and failures for undertaken courses during higher education. This was truly possible by virtue of a basic qualitative approach in which "the overall purpose is to understand how people make sense of their lives and their experiences" (Merriam 1998: 23). Once the participants explicated the self-reflections on their attributions and attributional biases that are thought to be bounded to perceived causes of events (i.e., attributions for effort, ability, chance and contextual factors) and causal dimensions (i.e., locus of control, controllability, stability) for the authors, it was plausible to re-classify them to collapse into higher-order categories or categories of participant-led descriptions (Merriam, 1998). A basic qualitative research therefore allowed the researchers to make a recurrent comparison across the emerged themes that were derived *only* from the clarifications of the participants. To advocate, this research approach was generally utilized by researchers to clarify recurrent patterns of themes or categories, which explore or understand a phenomenon or a process not to focus on culture or build a substantive theory as achieved in theory ground studies (Merriam, 1998).

Data Collection Processes

The data were gathered through semi-structured interviews. An in-depth interview was conducted by the authors in the university office as a mutual meeting location. Prior to data collection, the interview protocol was designed, based on the authors' research purposes addressed by the research questions of the current study, by taking the existing theoretical frames into account (Lefcourt et al., 1979; Pintrich & Schunk, 2002; Weiner, 1985, 1986, 2000, 2010; Hamilton & Akhter, 2002;). The interview protocol incorporates five interrelated *a priori* categories of academic attributions (i.e., four categories for perceived causes of events: effort, ability, chance, contextual factors, and one category for achievement perceptions). Put it differently, the interview protocol was included five sets of questions: (i)achievement conceptualizations, (ii)effort attributions, (iii)ability attributions, (iv)chance attributions, (v) contextual factors attributions.

The interview protocol incorporated 10 main questions, as two main questions for each component, and 21 probing-prompting subordinate questions to enlarge the responses of the participants. The protocol was externally audited by two experts who have specializations in the field of (educational) psychology prior to administration. A pilot data was gathered to ensure whether the questions were sufficiently serviceable.

The pilot data were collected from seven graduates. First, 11 external participants were invited to contribute to a study on the graduate students' attributional typologies. Seven of the 11 external participants welcomed the invitation and by virtue of 60-75 minutes interviewing processes, they contributed to the development of the finalised structure, format and questioning flow of the interview protocol. In other words, following the pilot study, the questions were reorganized based on the gained experiences from the aforesaid first-trial processes.

The authors got in contact with the participants to initiate data collection procedures. Whole interviews were conducted in a silent and non-distracting environment and the conversational exchanges between the interviewer and interviewee were recorded through an audiotape by stating the presence of voice recording overtly to the participants (Fontana & Frey, 2000; Silverman, 1993). Interviews were maintained in 120-150 minutes, respectively. The purpose of the study and the authors' intentions were explicitly and sincerely explained to the participants. There were no attempts to judge or evaluate the participants' responses. The control of the conversation had been changed from the interviewer to the interviewee, or vice versa. The authors were therefore of the idea that the participants were encouraged to talk freely and completely externalized themselves about their academic attributions that supplied considerably ample data that might remedy the lack of additional data sources for a naturalistic inquiry (Patton, 1980).

Data Analysis

Data analysis was based on the following procedures. Voice-recorded conversations were verbatim transcribed and the accuracy of transcriptions was checked for analysis. First, the participants' academic attributions were sought within the previously sectionalized perceived causes of events. Secondly, within each perceived causes of events (attributions for the categories as effort, ability, chance and contextual factors), the participants' academic attributions were detected by means of inductive method in order to extract the indicators of the each dimension (Patton, 1980).

The authors re-read the transcripts separately to construct a flexible coding list and labelled codes were collapsed into previously defined categories. Through the many rounds of rigorous negotiations of the abstracted codes and categories, iterative modifications of the raw categories were attained. To note, despite the fact that the authors' vision was rigidly framed with the model of attribution, they sincerely intended to seek the model's aspects in the participants' utterances, instead of restricting themselves with predetermined hypothetical arguments. In other words, *the category-characterizing elements* (presented later within Results section) that were found through analyzing the participants' attributions were neither hypothesized in advance nor derived from the solid related literature. To put it differently, analysis of the participants' perceived causes of events for academic success were analysed in a both data-driven and theory-laden sense.

Trustworthiness of the Study

Even though the gathered data was restricted, other tech-

niques were incorporated in order to meet the standards of validity for the current naturalistic inquiry. First, the authors negotiated the ongoing investigation with their expert colleagues during establishing the interview protocol and maintaining data analysis. These interactions with colleagues served as peer debriefing (Lincoln and Guba 1985). Secondly, a member check was conducted with the informants as participants through informal conversations by emails to revalidate the established codes and themes. These cautions were taken for the validity of the current inquiry.

For reliability, during the data analysis processes, as a result of many rounds of negotiations concerning the tentative coding list and categories, iterative revisions of the raw categories were achieved and continuously modified. For the first rounds of coding, the inter-coder reliability was lower (78%; relatively). However, the authors found out the ways of attaining a more acknowledgeable inter-coder reliability level (calculated as 87%) by means of rigorous negotiations of mutually exclusive codes or themes (Miles & Huberman, 1994).

FINDINGS

Through a fine-grained analysis of the participants' attributions to their successes and failures, 27 attributional themes were abstracted. The extracted attributional themes were presented as the *most featured statement(s) of the participants*. The most featured statements were extracted once the analytical codes were saturated (Glaser, 1978; Strauss, 1987). About 13 (48%, respectively) of 27 themes were devoted to Wendy whereas about 14 themes (52%, respectively) were derived for Roger's attributions. For *achievement perceptions* five (18.5%, respectively) attributional themes were composed: *ability* (*n*=5; 18.5%, respectively), *effort* (*n*=6; 22%, respectively), *chance* (*n*=4; 14.8%, respectively) and *contextual factors attributions* (*n*=7; 26%, respectively).

Achievement Perceptions

Two important aspects were emerged in Wendy's statements (Figure 1). She has been of the idea that one's achievement depends upon her ability in putting the theory into the practice. In other words, according to Wendy, success infers genuine practical applications of the acquired knowledge as a reflective practitioner.

"Operating theory to different contexts… Rather than having a better grade… Of course getting good grades is a simple issue as well, therefore there is no need to be successful to get better grades, and achievement is only, up to me, treatment of newly acquired knowledge and facts to different fields." (Wendy, 119).

Moreover, Wendy has perceived the achievement as a lifelong process. She has judged herself as a novice for her occupation (researcher in a university) and felt herself at the beginning of the profession. She has considered the achievement as a continuous entity as she has not been looking for an ultimate end.

Roger draws out a different portray of achievement, however. Initially, he indicates that there has been a "before and after" dichotomy for her regarding her achievement experiences. According to Roger, success simply denotes outperforming others and getting better grades when he was an undergraduate. This perception is seemed to be substantially associated with "social comparison" concept (Mitchell & Schmidt, 2014).

"In my opinion, achievement…Up to senior year, in my opinion, achievement was outperforming others and attaining better grades among others." (Roger, 118).

"In conclusion, you are in an array of examination processes, I mean evaluation processes among other people, you are located in a competitive class and you know nobody desires to be stupid among others." (Roger, 96).

After completing his under graduation, however, he had a completely different understanding regarding achievement as in the sense of "gaining mastery experiences". As understood from the clarifications of Roger, he had a "failure-avoidance" orientation towards success (Bandura, 1977, 1988). He storied that he has been taking his master degree and his evaluation criterions have been mostly based upon the performance assignments instead of prescriptively structured traditional examinations. He therefore has supposed achievement as

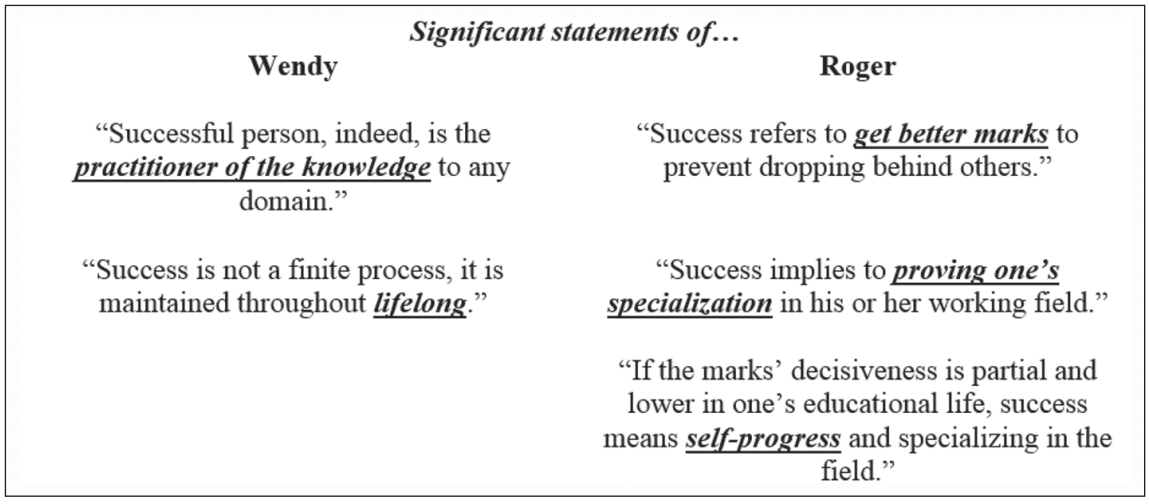


Figure 1: Achievement perceptions of the participants.

specializing in the field instead of getting better grades for outperforming others (see also Figure 1). To interpret, when meaning of grades are shifted in Roger's mind (when evaluation processes are based on evaluating his true performance instead of measuring his knowledge acquisition by conducting conventional methods) he might alter his perceptions concerning achievement or success. As a final note, Roger perceived the achievement as an organic process by emphasizing on lifelong learning similar to Wendy.

Ability Attributions

According to Wendy's experiences, her achievements have been considerably based upon the externally-regulated factors. To explain, for her, there is a partial dependence on academic ability, since; she attaches more attention to the *social interactions* in her work setting (see Figure 2). Wendy has considerably valued external factors, particularly, social interactions, compare to internal factors such as personal abilities. Put it differently, Wendy elucidated the value of warmth and civility for personal relations to be successful in her work setting. In other words, she is in need of making positive and scaffolding social relations with others

"My actual achievements do not depend on only my academic ability, even though my academic ability is superior, performing a task perfectly does not depend on only me, environmental factors are also effective. For instance, other people who work in my working area, my social relations and interactions with these people… Up to me these are more effective than my academic ability." (Wendy, 415).

"…All these influenced me negatively… And when I interrogated myself whether I am incapable in performing the task, I said to myself -No, substantially! - Even I could overcome the required tasks, I only needed more time and just sympathy." (Wendy, 436).

To support her idea, Wendy storied an experience. In her senior year, due to Wendy's cooperative group's co-advisor's prejudices, she was notably academically demotivated in the presence of the detrimental effects of the social happenings. In that time, Wendy decided to interrogate her academic ability and she pondered to define the determinants as the reasons of her lower motivation to success; in turn, she attributed that lowered motivation to the negative social occurrences. Presumably, Wendy may drastically be affected from extrinsic factors such as negative/positive social occurrences. To justify, intra-group interactions, non-democratic and insincere relations leaded Wendy to interrogate her academic ability even though she has been successful persisting in demonstrating higher-level performance.

For Roger's case, there were differences regarding ability attributions compared to Wendy's clarifications. For instance, Roger attributed getting into a well-known university to his academic ability. He compared his university's reputation to other universities and concluded that this achievement should be explicitly associated with his academic ability. However, Roger also mentioned that getting into a university was only a beginning, but not an ultimate goal. He therefore has believed that he has been at the bottom of the ladder.

"I mean, entering the X University (his special labelling) leaded me think that I have pretty much ability…You entered the X University, I mean the X University has not been an ordinary one in Turkey, thus, you feel yourself academically better, sometimes the best, among others." (Roger, 223).

"…After this failure, I interrogated myself regarding why I couldn't pass the exam, at the end of that process I came to a conclusion that it was just due to inadequate study, thus I had a break during one year to study hard, and one year later once again I took the exam and I succeeded." (Roger, 397).

Roger maintained by a different experience obtained from his academic preparations for getting into a better university. He talked about an acute failure for the first trialling in getting into the university. Expectedly, he criticised his academic abil-

Significant statements of…

Wendy	**Roger**
If I have been successful in my field, it arises from my positive, warmth and civil ***social interactions*** compare to my academic ability.	Being academically high achieving means to ***outperform others.***
Even though I am academically achievable, insincere and undemocratic ***social relations*** and interactions cause my failures in the field.	Except a few events, I am successful because of my higher ***effort.***
	If I had failed, in addition to my academic ability and effort, some external factors such as ***test anxiety*** might play a major role in my failure.

Figure 2: Ability attributions of the participants.

ity regarding why he could not get the sufficient grade from the nationwide exam. He decided to attribute this failure to his insufficient academic effort instead of available ability. In addition to effort attributions, Roger also attributed the aforesaid failure to the some external factors by taking the previous achievement experiences of him (his educational and personal academic background during secondary school years) into account, and she attributed the failure to test anxiety and to some other externally-oriented tacit contextual factors.

Effort Attributions

The first attribution of Wendy to her efforts was the familiarity of the assigned tasks or performances. Wendy attributed such a manner that she may not be in need of struggling for in the case of the familiarity or proficiency of the contents or contexts of the assigned tasks or performances. Wendy has been liable to be an internally-oriented attributor in the presence of the familiarity of required tasks; since, the practical and theoretical algorithms to accomplish given tasks have already known and acquired (see Figure 3).

"I cannot say I really expended more energy in a small scale project with kids, because these were not heavy works, but, I believe that I conducted that project in desired way with the aid of my certain prior knowledge and previous experiences, and in the final I gave very positive reactions to my students who were participated in the project." (Wendy, 528).

"I was puzzled at the beginning, I mean in this new field there have been many of things to deal with, I mean it is a new side of my profession, in these processes I read too many articles in order to set my design, and when I looked at the back, it was not very compelling and challenging, but in these processes because of lack of prior knowledge and experiences, I expended unbelievable effort to complete it in a desired way." (Wendy, 659).

In the case of the *invisibility* of the required performances, Wendy may tend to make attributions to external entities. Put it differently, when the personal practicability or attainability of the required task is reduced through an array of unfamiliar procedures, she may tend to avoid making internal attributions. To explain, Wendy may automate recognised strategies and skills for the required tasks (Seweller, 1988). However, she may not desire to use up enlarged intellectual energy to transfer previously learned strategies to non-familiar contexts or create new skills to cope with new conflictions embedded in the recently requested performances. As a plausible inference, Wendy, in all likelihood, may hold a *performance-based goal orientation* and *failure-avoidance posture* (Ames & Jennifer, 1988; Ames, 1992) regarding effort attributions. In this sense, newly required tasks should be moderately challenging that leads Wendy to persist in extending more effort to attain the task. Furthermore, once again Wendy expressed the instrumentality of the social exchanges as the most illuminating reason of making lesser effort for a novel *or* known required task.

Roger had distinctive articulations regarding the effort attributions compare to Wendy. Roger articulated that he began to interrogate himself in order to explicate the possible reasons of the failure; after getting a low grade from the physics course. At first, he compared himself with others in an academic sense, while he was coming into the actions, and finally he took some academic precautions (see also Figure 3).

"Because, if the other students got higher marks than me in physics, why I could not achieve at the same level?' Because, in conclusion, that man has been enrolled the University, and also

Significant statements of…

Wendy	**Roger**
If the tasks and performances are ***familiar*** to me and if I had done them before, I do not attribute my success to my effort in terms of these performances or tasks.	If I have a failure, most of the time, it is because of my ***low effort.***
If the content of tasks or performances is unfamiliar (something new), moderately ***challenging***, I do attribute my success to my effort in terms of those performances or tasks.	If I have a failure, initially I ***compare myself to others***, and motivate myself by saying if they succeed, I can also succeed, and by making more effort I succeed in second trying.
If I have been exhibiting lower performances, most probably, it is due to my ***negative social interactions and relations***.	In my failures and successes, both my academic ***ability*** and my individual ***effort*** play a major role.

Figure 3: Effort attributions of the participants.

I too have been enrolled in the same University, so, what is my deficiency, is there a problem with me?" (Roger, 218).

"I said to myself, you can make this better than you did, therefore I took the lecture for a second time and my previous mark was DD (a lower grade), then I got a BB (a higher grade) in the same physics course." (Roger, 245).

"I did not make an effort, seriously I did not make any effort, for instance I did not follow the lecture at the least, I parried and parried by convincing myself –I will do it later on, later on…-, I was not making effort, not reviewing related literature, and at the final, I tried to complete whole term tasks in only a few weeks, thus I had no a high expectancy, at the least I was expecting a BB, but I was graded as CC… In conclusion, I did not do many of the requirements of the lecture, it was not the lecture, it was me…" (Roger, 445).

After the initial social comparison and corrective self-feedback, Roger comprehended that the failure he confronted might be due to lower effort. Beyond, Roger tended to attribute his failures *or* successes to not only ability-based determinants, but also he has an *ability plus effort attribution style* (see Figure 3). Roger monitored himself to explicate why he could not achieve the course for the first time. According to Roger, his failure was exactly due to his very low effort. However, he was meta-cognitively aware of the determinants of the failure. He admitted that he had not concentrated on the lecture; as he had been in a decision-making process as he tried to determine the topic of his thesis research. Additively, in the presence of heavy assignments of the lecture (projects, presentations), obviously, he was cognitively overloaded, and expectedly had failed.

Chance Attributions

It should be noted that the participants perceived *the chance* as a marginalized aspect of their attributions and as the very last determinant of their academic successes or failures. For instance, for Wendy's case, chance is the endmost explanation for her successes or failures in the presence of other more concrete determinants (ability, effort). To support, Wendy had limited memories during her educational life in attributing to the chance for explicating the authentic reasons of her failures or successes (Figure 4).

"I mean, if you enter an exam without any further studying process, there may be a chance factor if you turn the wheel and you may succeed it, but, I am sure that it is a very extreme case." (Wendy, 818).

"Other things are greatly effective on my motivation, as I mentioned earlier, a silly statement of my lecturers' or advisors', a very small event that demoralizes me is enough to disengage me in tasks. This…yes might be a -good chance or bad luck- for me." (Wendy, 412).

Wendy, once again, attached importance to the social-motivational determinants in representing her attributions. Her increasing *or* decreasing motivation was an indicative determinant regarding her academic attributions. Wendy mentioned that there may be external circumstances which may alter her motivational mood(s). Moreover, Wendy evaluated negative and deviant social interactions as the main sources of her decreasing motivation, in turn, diminishing motivational mood influenced her effort attempts to achieve the required performances adversely. Chance was an aspect of Wendy's attributions, however, in the sense of exposing demotivating social interactions.

Roger had similar ideas to Wendy in attributing failures and successes for a task to chance determinants by some differences (Figure 4). He conceived *the influence of the evaluators* as a chance factor in getting higher or lower grades. He uttered that if he studied sufficiently and prepared himself well for an exam, he never attributed his failures or successes to the chance factors. To advocate, he talked about a course (thermodynamics) which he took during his under graduation and when he had difficulties in tackling with the laws of the thermodynamics, he had demonstrated a learned *helplessness* behaviour (Henry, 2005; Seligman, 1975).

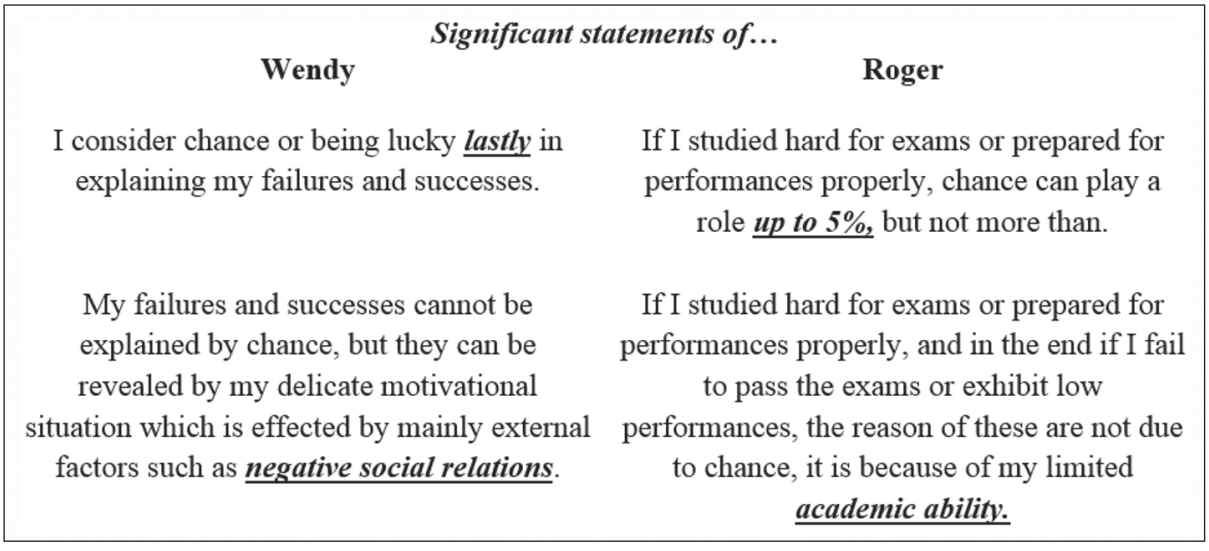


Figure 4: The participants' attributions to chance.

"Because, ultimately, exams are designed to evaluate something that you hold in your mind. OK, you had studied hard, even very hard, but, the evaluator can pose questions from very extreme points of content, that's the chance, but if I had studied hard, I, generally speaking, never think of chance to pass or fail in an exam." (Roger, 546).

"I obviously say to myself, thermodynamics are over my head, because you make an effort up to a certain point, when you do not progress in learning, you do strain and there is high tension, at the least I think that I have the ability to understand thermodynamics up to a certain level, but not more than that level, then I consider how much I learn if I make more support, perhaps I will understand a little bit more, but I cannot exceed that certain comprehension level in terms of apprehending thermodynamics." (Roger, 418).

To explain, even though Roger was formerly evaluated an attributor for mostly efforts regarding academic achievement, in specific cases, he may tend to attribute failures to his constrained ability. Roger tended to attribute failures and successes to his efforts in a general sense, however, in a case, such as a failure in a course (thermodynamics). Roger also tended to attribute the failure to the lack of ability and considers content difficulty (external attribution) as a reason of the failure. Presumably, he evaluated his initial efforts as frustrating because of learned helplessness behaviour (Henry, 2005; Seligman, 1975).

Contextual Factors Attributions

First, for Wendy, it was noticeable that she rarely got grades due to the *abundant grading approaches of the evaluators/ lecturers* (see also Figure 5). Wendy presented a comparison of the two university-led instances for advocating her attribution. In Wendy's former university, she was required to design project reports that were evaluated in a mundane, even with a picky manner, however in her latter university; her lecturers assigned them to design more sophisticated reports.

"You know there are some lecturers who do not spare to students in grading them, they, generally speaking, do not desire to mark somebody down, therefore because of these types of lecturers, I got better marks although I did not deserve to get that higher mark." (Wendy, 818).

"The evaluators divide the task into small pieces, I mean that phase is 2 points, that point is 5 points etc., then s/he searches in every nook and cranny within the frame of rubric." (Wendy, 129).

Moreover, Wendy was aware in which ways they have been graded, and she believed that scholars in her current university have administered more analytically developed tools to evaluate a learner's performance in a more detailed sense. Thus, in the sense of being informed about the concrete criterions, Wendy was liable to make true efforts to achieve the required performance in a desired sense, since; she held more control on the assigned works.

For that matter, even though Wendy attributed her successes to her true efforts, the nature and structure of the assessment styles provided by the scholars may have an influence on the amounts of given effort on the part of Wendy and could shift her attributions to effort. Additionally, according to Wendy, when course-related assignments are moderately challenging, this forms a propelling motivation to study hard to complete by getting better grades. However, if course-related assignments are not cognitively challenging, Wendy underestimated the assigned performances although she had been scored by lower grades. Therefore, moderately challenging course-related assignments leaded Wendy to attribute her successes to the given effort instead of content of the assignment as a contextual determinant of one's academic attributions.

"In my first university year, I took a course namely 'Turkish Language Learning', and if you ask me how much I made an effort to pass it, there is no need to discuss it, and I got higher marks in third year's lecture, but in terms of Turkish my mark was 70, you know an average one." (Wendy, 146)

Roger discerned evaluators' grading approaches as a partial indicator of his failure or success. According to Roger, self-enhancement should attach more importance compared to evaluators' straightforward and prescriptive evaluative criterions. Moreover, making an effort should be the major determinant in explaining his successes and failures instead of evaluators' solid assessments. To justify, Roger monitored his learning and made an individual meta-assessment of his self-progression in mastering on a specific task (see Figure 5).

"I am a postgraduate student. I understand something more profoundly. I believe that assessing my performance through evaluators' assessments and judgments are believable only to a certain extent, but not much! Making effort for the self-progress is more significant and a sufficient criterion for me. Recently, there is no regard of marks anymore. Instead, I am monitoring myself by considering how much I learned the subject! Of course, examinations and scales administered by evaluators reflect my learning progress to some extent; I am not denying that point… But it is not evaluative and indicative to conduct a classical exam only by considering a 600-page book's content and posing questions based on this book that are not by any stretch of the imagination. My performance cannot be evaluated through administering a classical exam." (Roger, 544).

Furthermore, he was strikingly influenced *the decisiveness of grades* in attributing his failures and successes to other determinants. As Roger expressed, if the importance of the grades was up to some extent in determining one's failures or successes, and if Roger's performances are evaluated in multiple ways instead of administering only solid paper-and-pencil exams, he was apt to attribute his successes or failures to effort through self-monitoring and self-judging processes. On the other hand, if the exams, tests, or grades are centralized, he was liable to attribute the faced failures and successes to his ability or earlier mentioned externally-oriented contextual factors.

DISCUSSION and EDUCATIONAL IMPLICATIONS

An in-depth examination of the participants' attributions to their academic attributions pointed a number of facts. First,

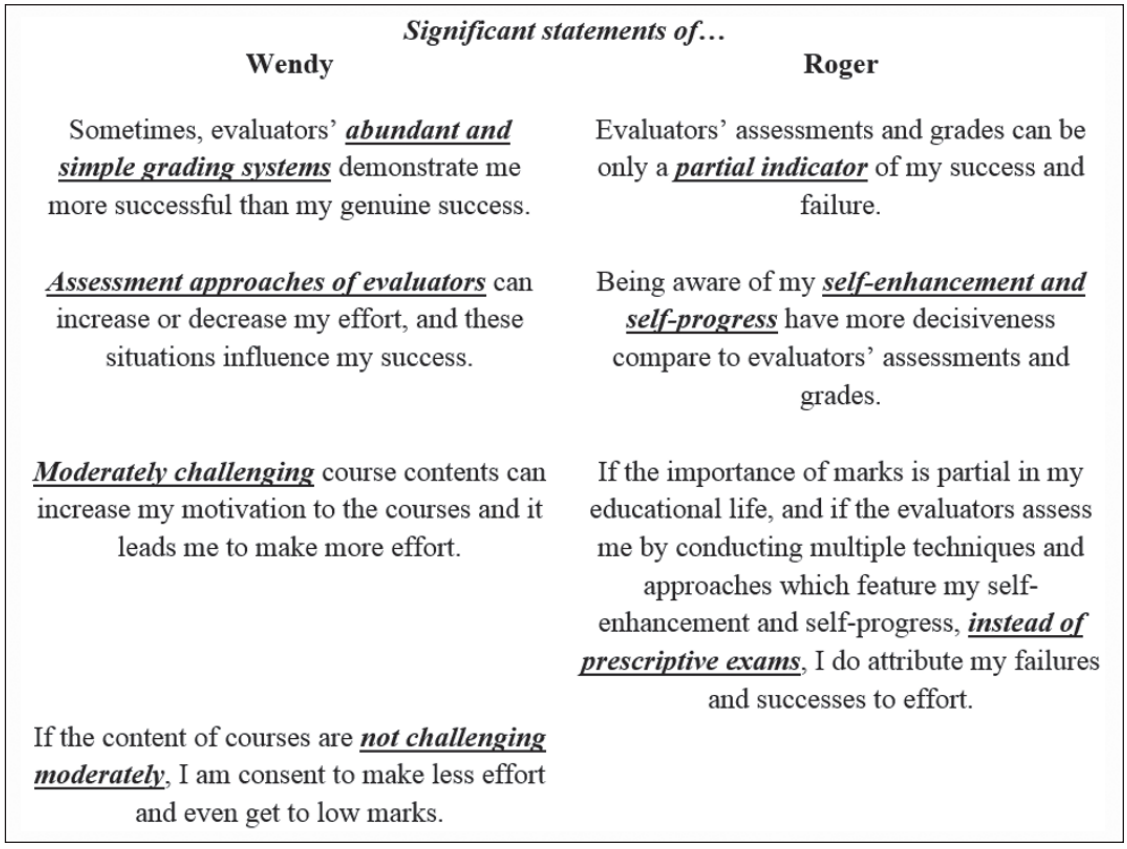


Figure 5: Attributions of the participants to contextual factors.

particularly for Wendy's cases, it was confirmed that social relations and interactions may play a major role in modifying one's attributions. Wendy frequently emphasized how her *social-academic setting*s have influenced her attributions that were mostly externally-oriented.

To our knowledge, external determinants are mostly associated with uncontrollable and stable attributions (Weiner, 1985). This argument is not completely valid for Wendy's cases, however. To explain, people are liable to consider, for instance, task difficulty for their failures as an external determinant (Weiner, 2005, 2006). Conversely, people may also conceive their families, friends or peers as persons who may contribute to the occurrences' positive consequences, in turn, more internally-oriented attributions that are qualified as mostly controllable and unstable can be emerged (e.g., Liu, *et al*., 2009; Ng, *et al*., 1995). Social determinants therefore can function contrary to task difficulty even though these are clarified as external determinants.

In the current study's context, there were mixed findings for the cases of Wendy. For Wendy, externally-oriented social-contextual determinants serviced as similar to the task difficulty by lowering her motivation in making an effort to attain a task, or vice versa. To justify, she had suffered from disturbing social determinants (undemocratic, insincere social interactions) whereas more warmth and civil social relations contributed to the Wendy's internally-oriented academic attributions. As a whole, social happenings (better interpersonal relations) may alter social-interactive contexts in which a person may drastically shift his or her academic attributions to the ability (Weiner, 1994, 2000), at the least confirmed in this study.

Secondly, Roger generated different attributional tendencies compared to Wendy, however. He mostly attributed his successes and failures to effort. In other words, *except a few specific academic events*, he was liable to attribute his achievements to the effort instead of the academic ability. To illuminate, individuals may have inherent dispositions to attribute their successes mostly to effort, *except a few single personal achievements* (Bong, 2004; Liu et al., 2009; Weiner, 1985). However, Hsieh and Schallert (2008) indicated that the ability may be the greatest estimator of the attributional style and contributor to the one's self-pride and self-efficacy. Roger's cases incorporated this dichotomy, since; there were variances for his academic attributions. For Roger's cases, *effort-related* attributions were seemed to be the strongest predictor of his future achievement orientations in addition to ability attributions. To support, according to Kelley (1973), individuals may hold causal schemas and make attributions by operating these causal schemas when there is no sufficient information for the reasons regarding the successes and failures.

The causal schemas are twofold: *multiple-sufficient* and *multiple-necessary*. For Roger's cases, he was seemed to operate *his multiple-necessary* schemas implying both his personal efforts and academic abilities were in action when he was attributing to the causes of academic events (Weiner, 1992). Roger's attri-

butional style incorporated an *adaptive strategy* for his future achievements. As Elliott (2005) suggested, people who make attributions to their successes both in terms of effort (mastery-oriented) in general, and ability (performance-oriented) in particular, may adopt the most adaptive strategy in estimating their achievements (Ames & Jennifer, 1988; Ames, 1992). As a result, *ability plus effort attributions* may be more serviceable in determining future decisions and actions of Roger as an attributor.

Another argument may also explain the specific case of Roger. Ames and Felker (1979) proposed that if an individual holds substantially greater competence for an academic subject and when s/he faces with a failure, s/he may be liable to attribute his or her failure to insufficient effort or task difficulty instead of lack of ability. For Roger's cases, in a course regarding thermodynamics, he attributed his failure to his lower performance and constrained academic abilities. Consequently, in the presence of control dimension (controllability-uncontrollability) Roger derived *learned helplessness behaviour*, since; initially, he was of the idea that he could not control his achievement for the course regarding thermodynamics (Peterson, Maier & Seligman, 1993; Weiner, 1986). In a responsive manner, Roger generated a well-structured coping strategy for the learned helplessness behaviour. According to Roger's strategy, he was seemed to overlap the motivational (*provides information on progress and competence; may include social comparison and persuasion*) and attributional (*links student performance one or more attributions*) self-feedbacks (Pintrich & Schunk, 2002).

Thirdly, attributions of people may also be considered as *idiosyncratic* that was valid for the participants of the current study. To justify, there were a few common attributions of Wendy and Roger regarding effort, ability, chance and contextual factors. To illustrate, the qualitative data was collected independent from any specific academic fields. The participants therefore were allowed to represent their distinctive experiences. They also provided topic-specific instances regarding their attributional reasoning while explaining the perceived causes of the events faced with.

Wendy gave specific examples from Human-Computer Collaboration, Computers in Educational Technology whereas Roger mentioned about the theoretical frameworks of Science and Science Education. Conversely, there were also common attributions about different aspects of perceived causes of events for Wendy and Roger's cases. For instance, the achievement perceptions of Roger were seemed to be changeable in the presence of the more controllable factors (knowing the assessment styles of the evaluators) for her. For Roger, when external factors (initially being stated assessment criterions, presenting multiple assessment methods of evaluations of the tasks or performances) were more manageable, this permitted Roger to alter his externally-oriented attributions into internally-oriented ones. This was also evidently valid for Wendy. Familiarity of the assigned tasks was seemed to shift the direction of the causal attributions Wendy declared from the externally-oriented to internally-oriented attributions.

Moreover, moderately challenging assigned task contents appeared to have more positive influences on the persons; particularly when they make attributions to effort. Briefly, persons may be liable to make more plausible estimations about more known and recognized events, tasks, performances, homework, and so forth (Weiner, 1985, 1992, 2000, 2005). When people are more knowledgeable regarding the happenings around them, it would be easier to take them in hand, consequently; more controllable and unstable attribution tendencies would be emerged in the presence(s) of more visible or predictable occurrences (Weiner, 1986, 1994, 2006, 2010).

This specific argument of the AT confirmed in this study may also be explained by another supporting theoretical model. According the *abnormal conditions attribution model* of Hilton and Slugoski (1986), people, most of the time, are liable to ponder about the events when the outcome is *unexpected*. In other words, if there is an unexpected outcome of an event, people try to provide attributions to *abnormal entities* in order to determine the perceived causes of events (Hilton & Slugoski, 1986). For example, for Wendy's case, when she encountered with a familiar situation which she has experienced the situation repeatedly and regularly; by the help of automatized strategies, she did not make an attribution to effort, even though she made moderate effort to achieve it. To put it differently, as a sequence, when she studies regularly for tasks and exams good enough, expectedly, she achieves the exam or assigned work and this outcome has not been in her mind as in the form of expectations; as a result, there has been no abnormal situations (studying hard, then failing exams or performing poorly).

As a whole, in the context of higher education, attributions of persons may be socially-regulated: positive higher academic contexts and sincerer interpersonal relations may have power to change attributional typologies of the graduates, as shown in this study. It can be asserted that even though being an academic researcher is a solid and rigorous professional occupation in the context of higher education, for more plausible and healthy attributions, the scholars are also in need of humanistic interrelations. Moreover, ability-related and effort-related academic attributions work better together in the context of higher education. Since; people have both internal and external motivational needs and urges (Pintrich & Schunk, 2002).

In the context of higher education, future academics may not be aware of their faulty or detrimental attributional typologies. However, being informed about one's attributional reasoning may be drastically powerful in reviewing the perceived causes of the events when s/he makes crucially important decisions. Therefore, as a suggestion for higher education context, attributional retraining programs may also be mutually impressive for graduates to eliminate their fallacious attributional habits for prompting them for being more optimistic and mentally powerful persons (Hladkyj et al., 1998; Hunter & Perry, 1996; Menec, Perry, Struthers, Schonwetter, Hechter, & Eichholz, 1994; Perry & Penner, 1990; Perry & Struthers, 1994; Ruthig et al., 1996).

Finally, more controllable instructional contexts within higher education may drastically influence graduates' attributional tendencies. Since; people in higher education are inherently motivated to estimate the outcomes of events. As a social agreement within the context of higher education, if graduates are more being informed regarding, for instance, analytical and holistic assessment criterions, they will be controlling their decisions and accompanied actions. In other words, the more information verifies, the more meaningful attributions there will be.

Implications for Further Research

There may be featured recommendations for the further research. First, this study can be considered as a prototype for researching into the success attributions of the graduates. For permitting external readers in making generalisations to their own circumstances, different contexts, cases and groups in which these types of attributions are made should be considered and examined. Secondly, in addition to one-to-one interviewing, other types of data collection tools can be effectively conducted in augmenting the scope the arguments derived in this study. Beyond, in addition to the qualitatively-oriented studies, quantitatively-oriented explorations can also be carried out, for instance, in order to find out how and to what extent civil and social relations estimate the attributional reasoning of the graduates in ensuring whether there may be causal relations between aforesaid variables.

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