



Tackling Graduate Unemployment

Imran Uddin ALVİ*

*The Markfield Institute of Higher Education**

“Do not make small your aspirations for I have not seen anything more paraly-
sing than fallen hopes” *Caliph Umar Al-Khattab* (Al-Mawardi, 2013, p. 319).

Abstract

Youth unemployment is a growing, global issue with regions of the Muslim world being particularly exposed to the problem. This paper examines a sub-set of this issue; graduate unemployment. In particular, it seeks to understand the role of student aspirations, knowledge, and motivation in tackling this issue.

The paper draws on the Islamic literature to develop a theoretical framework of *Uluww-al-himmah*, high-aiming aspirations, and *Rajaa*, true hope. These concepts are studied with the aim of improving not only graduate employment rates but also the well-being of graduates who do not find employment. The theoretical framework provides a more holistic approach through which policy-makers may address the issue of graduate unemployment by delineating four interrelated axes that impact graduate employment, namely, *Reach*, *Purity of Purpose*, *Knowledge* and *Strength of Intention*. By doing so, the framework facilitates the appraisal of educational spending by intervention type, thus highlighting underserved priority areas; allows policy interventions to be evaluated through the tracking of student progress against each axis; and allows policy interventions to be customized at the individual student level to reflect the heterogeneity present between students. The paper therefore provides a fresh perspective for policy-makers and institutional leaders to pursue.

Keywords

Labour Economics, Islamic Economics, Graduate Employment, Wellbeing, Aspirations.

JEL classification – J24, J64, J68

* Dr. Honorary Research Fellow, The Markfield Institute of Higher Education (United Kingdom) and Chief Executive, Oxford Intellect (United Kingdom), imran@oxfordintellect.co.uk, ORCID: 0000-0002-8057-9539

** The author is grateful for comments from Professor Khurshid Ahmad (Institute of Policy Studies, Islamabad) and Professor Amin Abdul Aziz (Institute of Policy Studies, University of Brunei Darussalam).

Introduction

Youth unemployment is a growing global problem. From 1991 to 2020, the World Bank recorded a 43% increase in world youth employment from 10.8% to 15.5% (International Labour Organization, 2020a). This problem is deeper in certain regions of the Muslim world. The Middle East and North Africa region records a youth unemployment rate of 26.7%, and the region of South Asia records a rate of 20.1%. At a country level, Egypt and Brunei record youth unemployment rates of just under 30%, and Saudi Arabia and Turkey are not far behind at 28% and 22%, respectively. Recent research shows Covid-19 is expected to worsen the situation through its disproportionate effect on youth (International Labour Organization, 2020b).

The negative effects of youth unemployment with respect to future employment and well-being often referred to in the literature as scarring, are well documented (Bartelink et al., 2019; Bell & Blanchflower, 2011; Strandh et al., 2014; Gregg & Tominey, 2005). This paper focuses on one sub-set of youth unemployment, namely, graduate unemployment.

The paper acknowledges that limiting the purpose of undergraduate education to employment is an oversimplification. The purpose of education has been a topic of debate for some time (Williams, 1985). Within the economic literature, varying approaches have been proposed and appraised, with Human Capital Theory being particularly influential in recent education policy (Gillies, 2017). The eminent scholar, Shah Wali-Allah, provides an insightful induction into the purpose of education from an Islamic perspective (Wali-Allah & Hermansen, 2003). Given the wide-ranging benefits of education, the contribution of this paper is to focus on one of these benefits: namely, to develop graduates that contribute to society through their chosen vocation.

In an attempt to understand the cause of graduate unemployment, academics have put forward a variety of possible explanations. Research has focused on the rapid growth of graduate numbers (Green & Henseke, 2021; Universities UK, 2015), the role of work experience (Passaretta & Triventi, 2015), the coherence between the skills taught and those demanded by employers (Atfield & Purcell, 2010) and the role of technological development (Jonathan & Turner, 2019). Despite numerous policy interventions based on these explanations, the problem of youth unemployment persists.

This paper differs from the above approaches by examining the role of the attitudes and behaviour of individual undergraduates as a key driver of employment and well-being of graduates. That is, it moves away from an analysis of the market for employment and focuses on the job seeker's individual behaviour in order to address the issue of graduate unemployment.

The approach taken in this paper is supported by the behavioural economics literature which is now well established. The behavioural economics literature has demonstrated the efficacy of interventions that target the behaviour of individuals, rather than the environment in which individuals choose, in order to deliver desired policy outcomes. A plethora of examples exist. Thaler and Benartzi (2004) demonstrate how targeting individual behaviour has improved saving rates; others investigate how behavioural approaches can deliver healthy eating outcomes (Roberto & Kawachi, 2014) and Kallgren et al. (2000) show how prosocial behaviours can be encouraged to achieve policy goals.

Behavioural economics has shown the shortcomings of the idea of *homo economicus* in a number of settings (Thaler & Sunstein, 2009). Therefore, in order to develop interventions that address graduate unemployment, a better understanding of what drives the decision process at an individual level is needed. This paper is a step in that direction and is particularly interested in the role of aspirations, knowledge, and motivation in this decision process.

To this end, this paper draws on the Islamic literature to develop a theoretical framework of *'Uluww-al-himmah*, high-aiming aspirations, and *Rajaa*, true hope, and their role in graduate unemployment. These concepts are studied with the aim of improving not only graduate employment rates, but also the well-being of graduates who do not find employment post-graduation.

This novel approach seeks to add to the arsenal of policy interventions that can help address graduate unemployment. By doing so, it aims to highlight areas of policy intervention that are underserved; facilitate the evaluation of policy interventions according to a more relevant set of metrics, and provide a framework through which policy interventions can be customised at the individual student level to reflect the heterogeneity present between students.

Survey of the Literature

This paper is interested in the role of *'Uluww-al-himmah*, high-aiming aspirations, and *Rajaa*, true hope, on graduate employment and well-being. *'Uluww-al-himmah* captures a sense of high-aiming aspirations, and *Rajaa* combines the knowledge of how to succeed with the motivation to implement that knowledge.

The academic literature does not, to my knowledge, provide a theoretical framework for this topic based on the Islamic canon of knowledge. There are,

however, a number of related threads that are relevant to this work. A brief introduction to the more relevant of these threads is provided here, along with their connection to the theoretical model being developed in this paper.

The academic literature has taken a keen interest in the effect of aspirations and attitudes on academic attainment and participation. Gorard et al. (2012) systematically review information from almost 170,000 pieces of evidence on the topic. It is interesting to note that despite the breadth of evidence available, they identify the *quality of evidence* as the reason for not being able to determine a causal relationship between aspirations and educational attainment. A clear theoretical framework, which this paper argues for and constructs, combined with an experimental approach through randomized controlled trials, will help fill this gap.

Turok et al. (2009) examine the educational aspirations of poorer children. They find higher aspirations are not the limiting factor. Rather, knowing *how* to fulfill these aspirations is highlighted as the key issue. This connects to the discussion of the knowledge axis of *Rajaa* in Islamic literature (see section *Modelling Rajaa* below).

A thorough review of the literature relating to motivation is provided by Kanfer et al. (2017). Others study the role of career choice motivation on academic burnout (Mohebbi et al., 2021), the role of motivation within particular careers (Watt & Richardson, 2008) and the influence of motivation on achievement (Duckworth et al., 2007; Jachimowicz et al., 2018). Evidence suggests that motivation is important in understanding behavior, particularly when coupled with a strong passion for the desired outcome. This interconnected relationship is denoted through the *Purity of Purpose* and *Strength of Intention* axes of the model.

University career services have been developed to provide the necessary knowledge needed by students on their journey toward employment. Their role and efficacy have been researched and questioned in a variety of ways. A linguistic analysis of over 58 university websites concludes that career service messaging suggests that if students want to succeed in the graduate job market they need to prepare for the world of work, follow instructions and develop their employability (Fotiadou, 2021). The author points out how this is at odds with the idea of empowering students to compete in the job market. Others point to the lack of take-up that can occur when career services are not connected to the main programme of study (Crowne et al., 2020), hence leading to the available resources not being accessed. On the other hand, career centres have been shown to increase the self-efficacy of student decision-making with respect to career (Reese & Miller, 2006) and to pursue varying strategies in addressing knowledge gaps held by graduates (Farenga & Quinlan, 2016). The research, therefore, points to the multi-faceted knowledge store that is needed by students in order to gain employment. This is encapsulated in the model through the *Knowledge* axis.

Theoretical Model

The theoretical model provides a framework through which interventions aimed at improving graduate employment and well-being can be mapped. Each student will necessarily navigate an individual journey mediated through their choices, internal state, and the external environment they are faced with. We are interested in the role played by the aspirations, knowledge, and motivation of a student when navigating this journey.

Our model is underpinned by the discussion in Islamic texts on *'Uluww-al-himmah* or high-aiming aspirations and *Rajaa* or true hope. The remainder of this section introduces these two topics from the Islamic perspective (for a more detailed discussion, see Ibn-Qayyim (2020) and Al-Ghazali (2014b) respectively) and provides an analytical framework through which they can be applied to graduate employment.

3.1 *'Uluww-al-himmah*

The discussion on *'Uluww-al-himmah* delineates the consequence of aiming high in individual achievement. The prolific scholar, Ibn al Qayyim Al-Jawziyyah, explains that *Al-Hamm* is the beginning of any action, and *Al-Himmah* is that which is found at the end of your actions: namely, your aspirations (Ibn-Qayyim, 2020).

Islam is emphatic in its encouragement of inculcating high aspirations, the highest of which is to endeavor for the Pleasure of The Divine (Quran.com, n.d.). Individuals are edified to aim for the pinnacle of achievement in matters pertaining to the Hereafter. This is evidenced by the hadith in which believers are fortified to ask not for Paradise but for the highest rank of Paradise – *Al-Firdaus* (At-Tirmidhi, n.d.).

This aiming for the Pleasure of The Divine is in unison with seeking the good of this world. This is demonstrated through numerous hadiths, for example, that which depicts this world as a sowing ground for the Hereafter (An-Nawawi, n.d.a). Thus, while the Pleasure of The Divine is the ultimate goal, this goal is to be sorted through our behaviour in this world. This joining between our behaviour in this world and success in the next provides a robust policy avenue to address graduate unemployment. In particular, it supports the policy objective of high graduate employment through the development of high-aiming students, and secondly, for those who do not find employment, it provides a mechanism to safeguard their well-being.

3.2 *'Uluww-al-himmah Supports Achievement*

Islam is a faith that offers guidance for all aspects of life through an interconnected thought-processing system between the mundane and the sublime. Having high-aiming aspirations to achieve the Pleasure of The Divine should therefore incite a wide range of actions in an individual. For undergraduate students, one such action is to gain meaningful employment that facilitates their contribution to self, family and wider society.

It is an obvious statement that the one who does not aim for a target is highly unlikely to reach it. More pertinent to this narrative is the necessity of aiming high to realise the full potential of undergraduate students. Through well-documented life accounts spanning over 1000 years of history, the Islamic literature affords a plethora of examples that demonstrate how this concept of *'Uluww-al-himmah* was translated into the lofty achievements of individuals pursuing different areas of expertise (Nadwi, 1986).

3.3 *'Uluww-al-himmah as a Source of Wellbeing*

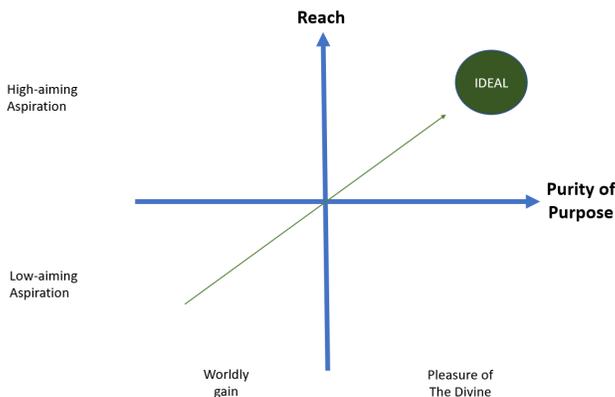
The Islamic literature is clear in bonding aspirations of this world to the greater aspiration of achieving the Pleasure of The Divine. For Muslim graduates, this union is helpful in supporting an individual's well-being if faced with the unfortunate situation of unemployment after graduation.

Key to the delivery of an individual's well-being is their understanding of the reward system. Islam shifts this reward system to seek the Pleasure of The Divine. Thus, success and failure are assessed through a narrative that is starkly different from narratives of salary size, acceptance by family, or resemblance to the peer group.

The reward system in Islam is underpinned by intentions (Al-Bukhari, n.d.). Thus, if one were to aim for a praiseworthy goal but not achieve it, a reward from The Divine would still be gained (An-Nawawi, n.d.b). The reward system taught in Islam is thus a natural source of well-being for unemployed graduates. It teaches *'Uluww-al-himmah* as a source of reward in and of itself, even if the high-aiming aspiration with respect to employment is not realised.

3.4 *Modelling Himmah*

We model *Himmah* across two axes: reach and purpose (see figure 1).



The y-axis, Reach, represents the height to which an individual's aspirations reach. At one end of the spectrum, a student simply aspires to graduate. There is no further reach in aspiration. At the opposite end of the spectrum, the student aspires to reach the pinnacle of their chosen work area.

The x-axis, Purity of Purpose, examines the motivation behind the student's aspiration. To the left of the y-axis, the dominant motivation behind a student's aspiration is worldly gain. To the right of the y-axis, the dominant motivation behind a student's aspiration is the Pleasure of The Divine.

This distinction in motivation is worthy of further discussion. Firstly, note that a distinction between the left and right quadrants is made through *dominant* motivation. It is quite possible that an individual is motivated by both worldly gain and the Pleasure of The Divine (Al-Ghazali, 2014a). As we move further to the right, we near the goal of *Ikhlās* – to act with the sole intention of pleasing The Divine. This praiseworthy goal is supported by a multitude of evidence from the Islamic literature (Al-Ghazali, 2014a).

Secondly, it is important to differentiate between the motivation behind aspiration and the aspiration itself. Two students may have precisely the same aspiration, for example, to realise proficiency as an ophthalmologist, but their motivations may differ. The student motivated by worldly gain may desire accolades from his peers. The other, motivated by the Pleasure of The Divine, may desire to help patients that are unable to pay for treatment in order to win the Pleasure of The Divine. As discussed earlier, this difference in purpose has consequences on well-being.

3.5 Modelling *Rajaa*

The discussion on *Rajaa* complements that of *Himmah*, by providing an analytical framework of the journey towards the aspiration. In particular, we borrow from the work of Imam Al-Ghazali in his discussion of the concepts of fear and hope (Al-Ghazali, 2014b). In this discussion, the author provides a typology for individuals who hope to achieve a particular goal. While Imam Al-Ghazali's work is based on a discussion of hope in gaining mercy from The Divine, his typology has application to hope in achieving any goal. In our case, the goal is graduate employment and well-being. We simplify his discussion but hold to his terminology.

The first state is that of *Rajaa* or true hope. In this situation, the individual is imbued with the *Ilm*, knowledge, of what action must be taken in order to achieve his stated goal, and he has the *Quwwah*, strength of intention, to implement this course of action. While in this state, he hopes to achieve his aspiration.

The second state is that of *Wahm* or delusion. In this situation, the individual is fully aware of what action must be taken, but he does not implement this course of action. At the same time, he is still in the hope of achieving his aspiration.

The last state is that of *Tamannah* or vain hope. In this situation, the individual has the strength of intention to implement the necessary action, but he does not possess the necessary knowledge of the action needed to attain his aspiration. Again, he hopes to achieve his aspiration.

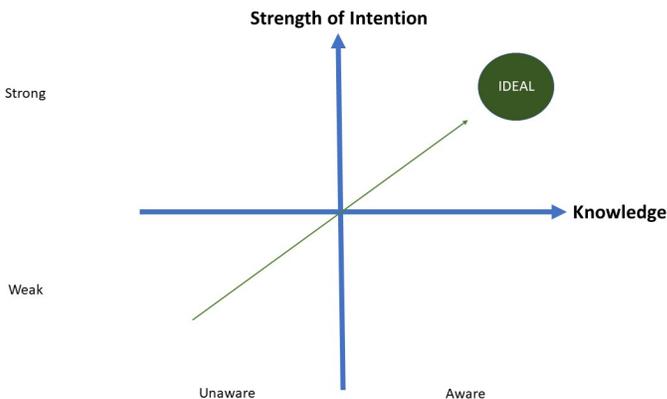
The fourth and last state, according to this division, is that when an individual neither possesses the necessary knowledge to achieve his aspiration nor has the strength of intention to implement the correct course of action.

These four states are summarised in the below quadrants (figure 2). Knowledge (*Ilm*) refers to the individual being aware of the course of action needed to achieve his aspiration. Strength of Intention (*Quwwah*) refers to the individual's willpower and discipline to implement this course of action.

The top-right quadrant captures *Rajaa* or true hope. The student is cognisant of the necessary course of action to achieve graduate employment and well-being and combines this with fortified strength of intention to see this action through. In this state, the student has true hope in achieving graduate employment.

The bottom-right quadrant captures *Wahm* or delusion. The student is cognisant of the necessary course of action to achieve graduate employment and well-being but does not have the necessary strength of intention to act on that knowledge. His hope in achieving graduate employment and well-being can therefore be seen as delusionary.

Lastly, the top-left quadrant captures *Tamannah* or vain hope. The student has the necessary strength of intention to act but simply does not know in which direction to do so. This lack of knowledge is the hurdle that stops him from achieving his aspirations with respect to graduate employment and well-being.



Discussion

The theoretical framework provides a mechanism to analyse and progress students towards graduate employment and well-being. It argues for progression on four fronts, three of which seem to be underdeveloped in university settings.

Firstly, undergraduates should be encouraged to form high-aiming aspirations with respect to their career plans. This is a foundational element of achievement in the job market, just as technical skills are a foundational element of achievement. However, evidence would suggest that relatively little resource is invested by universities in this area (Hasan & Alvi, 2022). Further research into effective mechanisms of university support to bolster student aspiration is an important trajectory for researchers to pursue.

Secondly, the purpose of aspiration should be in unison with the aspiration of seeking the Pleasure of The Divine. This link provides a safety net for the student's well-being should their career goals not be realised. It also further encourages students to aim high. For institutions encouraging an Islamic environment in their universities, connecting purpose with the Pleasure of The Divine appears to be an underdeveloped area. Again, further research is required on how universities can help to develop a sense of purpose in students.

With a particular aspiration in mind, the theoretical framework moves attention to the path to this goal. Two elements are necessary for a student to hold true hope (*Rajaa*) in achieving the set goal. Namely, knowledge (*Ilm*) and strength of intention (*Quwwah*).

To obtain true hope in attaining an aspirational goal, one inevitably needs knowledge of the correct course of action needed to achieve the said aspiration. For an undergraduate aspiring towards meaningful employment, this knowledge would encompass areas such as the technical skills needed to achieve employment in their preferred area of work, knowledge of how to write a convincing CV, and the soft skills desired by employers. A key function of universities is to develop higher-level skills, and many provide further knowledge and support through career centres, student societies, and alumni networks. While this paper has not attempted to survey the provision of such services, anecdotal evidence would suggest that universities are focused on this axis of provision and improving in it.

However, in order to claim true hope (*Rajaa*) in accomplishing employment, this knowledge alone would not suffice. True hope is founded upon the coupling of knowledge with a robust strength of intention that motivates the execution of the correct course of action. For undergraduates, this includes the strength to accomplish those actions that are helpful for their future employment in a timely fashion. This aspect of the strength of intention cannot be overlooked, as knowledge without action does not lead to employment. Evidence would suggest that this is an area in need of further development by universities (Hasan & Alvi, 2022).

Policy Applications of the Theoretical Framework

Each of the four axes discussed in the framework (Reach, Purity of Purpose, Knowledge, and Strength of Intention) provides a workstream that is wide enough to have a plethora of policy interventions sit within it. For example, in developing the reach of student aspirations, one may pursue an intervention that focuses on role models from industry, high achieving alumni from the same university, or career fairs that show the breadth of options that are available to students. Therefore, the theoretical framework developed in this paper has a broad scope for application.

The theoretical framework delineates four workstreams that are important in achieving the policy goal of improved graduate employment and well-being. Any of the four workstreams may be pursued individually; however, the framework argues for a holistic approach. In short, the policy goal is more likely to be achieved when all four workstreams are concurrently developed due to their interlinked nature.

A key strength of the framework is as a mapping tool for both government interventions and individual student pathways. Policy-makers may use the framework to assess which of the four workstreams they are currently investing resources in and which workstreams are underserved. Early findings demonstrate that significant imbalances exist between the four workstreams (Hasan & Alvi, 2022), which is likely to negatively impact graduate employment rates.

The framework also allows the mapping of each individual student's journey towards employment across all four workstreams. This will be important in research that attempts to assess the efficacy of any particular policy intervention and in research that is focused on personalizing interventions at the individual level. The latter is of growing interest given the increasing depth of data available to institutions on individual students.

In advancing research contributions that are focused on the application of the framework, a key area of work will be developing measures of the four axes. The rich literature in the Islamic canon of knowledge on aspirations, purpose, and strength of intention will be a useful resource in developing these measures.

Summary and Conclusions

This paper follows the more nascent work of behavioural economics to focus on triggers that induce a change in individual behaviour and choice. In particular, the paper offers a theoretical framework for the attitudes and behaviours of individual students on graduate employment and well-being based on the concepts of *'Uluww-al-himmah* and *Rajaa* from the Islamic canon of knowledge.

Four axes of progress are shown to be important. Namely, reach of aspiration, the purpose of aspiration, knowledge of how to attain that which one aspires towards and strength of intention in implementing that knowledge. These four axes are interrelated and need to be pursued in unison if the issue of graduate unemployment is to be meaningfully addressed.

The framework provides a coherent approach to furthering the policy goal of graduate employment and well-being. Policy interventions can be categorised and measured against the four axes, thus providing insights into where interventions are currently focused and where gaps exist that need to be addressed. Evidence suggests three of these four areas of progress could be strengthened in the university setting.

Evaluation of policy interventions is of obvious value. The theoretical framework provides a succinct ontology against which policy interventions can be measured in a more holistic manner.

Lastly, the theoretical framework allows for student heterogeneity. Given the granular level of data available to institutions, interventions should be customised to progress students against each axis of development according to their particular starting position. This tailored approach to policy interventions is a growing area of interest to policy-makers.

References

- Al-Bukhari, M. (n.d.). *Sahih Al-Bukhari*, Vol. 1, Book 1, Hadith 1: <https://sunnah.com/bukhari:1>
- Al-Ghazali, A. (2014a). *Al-Ghazali on intention, sincerity and truthfulness: Book XXXVII of the revival of the religious sciences*. The Islamic Texts Society.
- Al-Ghazali, A. (2014b). *Fear and hope*. Islamic Book Trust.
- Al-Mawardi, A. (2013). *Adab al-dunya wa al-din*. Dar al-Minhaj Jeddah.
- An-Nawawi, A. (n.d.a). *Riyad As-Salihin*, Book 15, Hadith 33: <https://sunnah.com/riyadussalihin:1440>
- An-Nawawi, A (n.d.b). *Forty Hadith of An-Nawawi*, Hadith 37: <https://sunnah.com/nawawi40:37>
- At-Tirmidhi, A. (n.d). *Jami At-Tirmidhi*, Vol. 4, Book 12, Hadith 2530: <https://sunnah.com/urn/727170>
- Atfield, G., & Purcell, K. (2010). Graduate labour market supply and demand: Final year students' perceptions of the skills they have to offer and the skills employers seek. *Warwick Institute for Employment Research, September*, 1–30.
- Bartelink, V., Ya, K., Guldbbrandsson, K., & Bremberg, S. (2019). Unemployment among young people and mental health: A systematic review. *Scandinavian Journal of Public Health*, 48(5), 544–558. <https://doi.org/10.1177/1403494819852847>
- Bell, D., & Blanchflower, D. (2011). Young people and the Great Recession. *Oxford Review of Economic Policy*, 27(2), 241–267. <https://doi.org/10.1093/oxrep/grr011>
- Crowne, K. A., Brown, M., Durant, D., Baburaj, Y., Hornberger, P., McCloskey, D., & Vike, L. (2020). A program for embedding career activities in multiple core business

- courses. *International Journal of Management Education*, 18(3). <https://doi.org/10.1016/j.ijme.2020.100421>
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/0022-3514.92.6.1087>
- Farenga, S. A., & Quinlan, K. M. (2016). Classifying university employability strategies: three case studies and implications for practice and research. *Journal of Education and Work*, 29(7), 767–787. <https://doi.org/10.1080/13639080.2015.1064517>
- Fotiadou, M. (2021). “We are here to help you”: understanding the role of careers and employability services in UK universities. *Text and Talk*. <https://doi.org/10.1515/text-2019-0162>
- Gillies, D. (2017). Human capital theory in education. In M. Peters (Ed.), *Encyclopedia of educational philosophy and theory* (pp. 1–5). Springer Singapore. https://doi.org/10.1007/978-981-287-532-7_254-1
- Gorard, S., See, B., & Davies, P. (2012). The impact of attitudes and aspirations on educational attainment and participation. *Joseph Rowntree Foundation*.
- Green, F., & Henseke, G. (2021). Europe’s evolving graduate labour markets: Supply, demand, underemployment and pay. *Journal for Labour Market Research*, 55(1). <https://doi.org/10.1186/s12651-021-00288-y>
- Gregg, P., & Tominey, E. (2005). The wage scar from male youth unemployment. *Labour Economics*, 12(4), 487–509. <https://doi.org/https://doi.org/10.1016/j.labe-co.2005.05.004>
- Hasan, H., & Alvi, I. (2022). Attitudes towards graduate unemployment in Southeast Asia: An examination using himmah and rajaa. *Forthcoming*.
- Ibn-Qayyim, A. (2020). *Ranks of the divine seekers*. Brill.
- International Labour Organization (2020a). *ILOSTAT database*. <https://data.world-bank.org/indicator/SL.UEM.1524.ZS>
- International Labour Organization (2020b). *Youth & COVID-19: Impacts on jobs, education, rights and mental well-being*. https://www.ilo.org/global/topics/youth-employment/publications/WCMS_753026/lang--en/index.htm
- Jachimowicz, J. M., Wihler, A., Bailey, E. R., & Galinsky, A. D. (2018). Why grit requires perseverance and passion to positively predict performance. *Proceedings of the National Academy of Sciences of the United States of America*. <https://doi.org/10.1073/pnas.1803561115>
- Jonathan, W., & Turner, J. (2019). Preparing graduates for work readiness: an overview and agenda. *Education and Training*, 61(5), 536–551. <https://doi.org/10.1108/ET-03-2019-0044>
- Kallgren, C. A., Reno, R. R., & Cialdini, R. B. (2000). A focus theory of normative conduct: When norms do and do not affect behavior. *Personality and Social Psychology Bulletin*, 26(8), 1002–1012. <https://doi.org/10.1177/01461672002610009>
- Kanfer, R., Frese, M., & Johnson, R. E. (2017). Motivation related to work: A century of progress. *Journal of Applied Psychology*. <https://doi.org/10.1037/apl0000133>
- Mohebbi, S. Z., Gholami, M., Chegini, M., Ghoreyshi, Y., Gorter, R. C., & Bahramian, H. (2021). Impact of career choice motivation on academic burnout in senior dental students: A cross-sectional study. *BMC Medical Education*. <https://doi.org/10.1186/s12909-020-02475-w>

- Nadwi, A. (1986). *Saviours of the Islamic spirit*. Academy of Islamic Research and Publications.
- Passaretta, G., & Triventi, M. (2015). Work experience during higher education and post-graduation occupational outcomes: A comparative study on four European countries. *International Journal of Comparative Sociology*, 56(3–4), 232–253. <https://doi.org/10.1177/0020715215587772>
- Quran.com. (n.d.). Quran (83:26): <https://quran.com/83/26?translations=>.
- Reese, R. J., & Miller, C. D. (2006). Effects of a university career development course on career decision-making self-efficacy. *Journal of Career Assessment*, 14(2), 252–266. <https://doi.org/10.1177/1069072705274985>
- Roberto, C. A., & Kawachi, I. (2014). Use of psychology and behavioral economics to promote healthy eating. *American Journal of Preventive Medicine*, 47(6), 832–837. <https://doi.org/10.1016/j.amepre.2014.08.002>
- Strandh, M., Winefield, A., Nilsson, K., & Hammarström, A. (2014). Unemployment and mental health scarring during the life course. *European Journal of Public Health*, 24(3), 440–445. <https://doi.org/10.1093/eurpub/cku005>
- Thaler, R. H., & Sunstein, C. R. (2009). *Nudge: Improving decisions about health, wealth, and happiness*. Penguin Books Ltd.
- Thaler, R. H., & Benartzi, S. (2004). Save More Tomorrow: Using behavioral economics to increase employee saving. *Journal of Political Economy*, 112(S1), S164–S187. <https://doi.org/10.1086/380085>
- Turok, I., Kintrea, K., & St Clair, R. (2009). Shaping educational attitudes and aspirations: the influence of parents, place and poverty: stage 1 report. *Joseph Rowntree Foundation*. <http://eprints.gla.ac.uk/40872>.
- Universities UK. (2015). *Supply and demand for higher-level skills*. [https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2015/supply-and-demand-for-higher-level-skills.pdf#search=over supply](https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2015/supply-and-demand-for-higher-level-skills.pdf#search=over%20supply)
- Wali-Allah, S., & Hermansen, M. (2003). *The conclusive argument from God: Shah Wali Allah of Delhi's hujjat Allah al-baligha*. Brill.
- Watt, H. G., & Richardson, P. W. (2008). Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers. *Learning and Instruction*. <https://doi.org/10.1016/j.learninstruc.2008.06.002>
- Williams, G. (1985). Graduate employment and vocationalism in higher education. *European Journal of Education*, 20(2/3), 181–192. <https://doi.org/10.2307/1502948>

