# Magnitudes of Impact: A Three-Level Review of Evidence from Scholarship Evaluation

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## 13.1   INTRODUCTION

International scholarship programs have considerable longevity, in some cases now measured in centuries (Pietsch 2011), yet attention to the outcomes of these programs is a relatively recent phenomenon. As late as the end of the 1980s, there appeared to be no clear approach to evaluation among any of the major donors and little published research (Strömbom 1989). Whilst this situation improved progressively throughout the 1990s and early millennium, it is only in the last decade that research on scholarships has become routine. During this period, donors and administrators have increasingly sought to publish evaluation findings, impelled variously by the desire for program improvement, pressure to demonstrate the outcomes of funding, and transparency requirements within public institutions.

In this chapter I offer a commentary on the results from evaluation research—both independently conducted and commissioned by scholarship administrators—published between 2006 and 2016. My critique focuses on funding offered for academic study outside of the recipients' country of residence ('home country'): most usually, although not exclusively, hosted in the country of the donor organization or government. The analysis

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primarily concerns full-degree mobility, although some reference is made to credit mobility within academic programs and to non-academic exchange programs (e.g. military exchanges).

Inevitably the quality of evidence varies tremendously, with the variety of approaches, instruments, and indicators as numerous as the studies themselves. This chapter is quite deliberately referred to as a 'review of evidence' and not, for instance, a meta-analysis or a synthesis. As others have commented, synthesis is not currently possible within such a varied evaluation evidence base (e.g. Nugroho and Lietz 2011). Instead, the present chapter approaches the findings of evaluation studies as a literature review addressing the three levels of classic sociological enquiry: micro, meso, and macro. In the context of scholarship programs, these levels map onto:

- **Micro:** individual outcomes for scholarship recipients
- **Meso:** organizational and institutional effects
- **Macro:** societal impacts

Major themes within each level are examined in turn, concluding with final thoughts on the current state of research evidence concerning the outcomes of scholarship programs. A small minority of topics routinely addressed in evaluation studies are intentionally excluded to avoid duplication: discussion of 'return rates' and the reintegration experience is omitted here, but has been discussed extensively in Chaps. 9, 10, and 11.

## 13.2    MICRO-LEVEL EFFECTS

At a fundamental level, scholarships help recipients to overcome the widespread difficulty of access to funding for international study. The accessibility of scholarships in comparison to other funding for international education has thus received some attention, primarily as a means of answering the criticism that scholarships are prone to supporting only socioeconomic elites. Where evidence is available, it tends to show that scholarships provide recipients with a means to study that would otherwise have been either entirely unavailable or have involved substantial informal (i.e. not state-backed) debt. Recipients of UK Commonwealth Scholarships, for instance, overwhelmingly reported that it was very unlikely they could have pursued the same degree program without scholarship funding (Mawer 2014). For those that felt they would have other means of accessing

study abroad, the anticipated funding was most frequently a different scholarship and not a self-funding option (Mawer 2014). The availability of scholarship funding is also an important influence on study location, particularly in relation to high-cost destination countries with Europe and North America (DAMVAD 2012).

Yet claims about supporting access need to be framed carefully. Most scholarship recipients must have already accessed and navigated their domestic higher education system to qualify for international scholarship programs: it is access to *international* higher education specifically that is facilitated. Funding international education within high-tuition systems—notably the USA—is likely to be beyond the reach of many societal groups, including those not necessarily marginalized within their home country. We should thus be cautious of treating self-reported evidence about the affordability of international education as a proxy of elite status. There is surprisingly little detailed analysis of the 'access' and 'social mobility' dimensions of international scholarship programs. Individual programs typically have a detailed appreciation of their recipients' socioeconomic background, but this data is not widely shared—with a few exceptions, such as the MasterCard Foundation Scholars Program (see Burciul and Kerr in this volume)—and nor is it commonly examined as a potential correlate of post-scholarship trajectory and impacts.

### 13.2.1   Individual Capacity and Disposition

Study-level outcomes from scholarship programs are broadly excellent. The degree completion rate for scholarship recipients is near-universally high (e.g. World Bank Institute 2008), with only rare exceptions (e.g. Něměckova and Krylova 2014). Research from the UK, Australia, and Germany has also indicated that a noteworthy minority of each master's degree cohort continues to doctoral study, building on the skills gained during their scholarship (DAAD 2013; Grigg 2016; Mawer 2014). Delayed return in favor of more advanced study can be a positive or problematic outcome depending on the program aims and the long-term effect of further study abroad. The most frequent scenario seems to be that individuals delay returning to their home country to undertake additional study in the scholarship host country (DAAD 2013), but there is limited research examining the compound effect of scholarships and subsequent further study against the original aims of the scholarship program.

Conversely, evaluation research has offered clear evidence that those who participate in scholarship-funded studies believe they gain greatly in what might loosely be described as 'knowhow': methodological competence, theoretical knowledge, and the sensitivity to bridge these domains. One example can speak for many: several years of survey data from over 2000 Commonwealth Scholarship recipients has found extensive self-reported gains in knowledge, analytic skills, and technical skills; greater confidence to introduce innovations in the workplace; and, to a lesser extent, improved management skills (Mawer et al. 2016). Assessing whether self-reported views from alumni are shared by peers at home is difficult. Attempts at developing a more holistic account of outcomes through surveying the employers of alumni, for instance, have often yielded poor response rates (e.g. Nuffic 2009). Staff turnover can also mean that employing institutions are themselves unable to provide a holistic assessment. Yet when evaluators have managed to reach employers, their perspectives have tended to reinforce the self-report evidence. Employers of German Academic Exchange Service (DAAD) scholarship recipients, for instance, felt their employees '… had broadened their knowledge in their field and had more understanding of methodology after completing their scholarships, as well as being able to work autonomously' (Raetzell, et al. 2013, p. 34).

Another dimension to individual outcomes concerns the disposition, intercultural competency, and perspectival impacts on the recipient. Catalyzing understanding and sympathy for host country values is a central aim of many scholarship programs (Atkinson, 2015). Even within programs with a developmental focus, the role of international education in building networks abroad has been emphasized: 'Winning partners for the future has been one of the guiding principles behind the postgraduate course programme from the very beginning' (DAAD 2013, p. 49). Evaluation studies have routinely generated evidence of positive attitudes toward host countries and, to a lesser extent, intercultural gains. Research on the Chinese Government Scholarship Program, for instance, has suggested that over 90% of research participants were positive about the likely promotion of long-term friendship between China and their home country (Dong and Chapman 2008). Analyses of German scholarship programs have yielded similar results. From survey respondents on development-related postgraduate courses funded by DAAD, 96% were positively disposed toward future cooperation with German organizations, 95% similarly disposed toward

closer contact with German individuals, and 83% reported that they would work for a German organization that had an office in their country (DAAD 2013). Chalid's (2014) research with Indonesian scholarship recipients has indicated that the intercultural dimensions of study in Australia were as important to post-scholarship trajectories as the academic content of study. These dimensions included traditional 'soft skills' such as language learning but also extended to new perspectives on governance and society, shaped by primary experience with Australian civic institutions and democratic process (Chalid 2014).

Understanding how and when such dispositional and intercultural gains materialize is complex because influences on individual attitudes are not commonly analyzed in scholarship evaluation. Research by Dong and Chapman (2008) has suggested that three important factors are the frequency of interactions with faculty, the cultural and intellectual engagement of the recipient, and the personal effort invested in the study experience. Interestingly, greater interaction with other *students* was not a significant factor in shaping positive disposition for the participants in Dong and Chapman's research (2008). Whether this finding is robust across other scholarship programs has not been established, but its implications are significant for program design since integration with peers is often one of the more challenging components of the study experience (see DAMVAD 2012).

Another potential difficulty is that interpreting dispositional outcomes without comparative data can be potentially misleading. Comparative evidence of any kind has been largely absent from scholarship evaluation and thus it is difficult to ascertain whether the attitudes of scholarship recipients differs from self-funded peers, although program administrators have reasonably assumed such an effect. Similarly, lack of baseline data on the disposition of scholarship recipients can create ambiguities about whether positive dispositional outcomes—such as large proportions of respondents well-disposed to future collaboration with the host country—are best described as 'gains' from scholarships or simply a description of those who were selected to receive funding. Sometimes this interpretation is made more complex by differing dispositions among applicants to scholarship. Evaluation of US scholarships in Latin America and the Caribbean (LAC), for instance, found that recipients' sentiment toward their host nation had become substantially more positive from baseline to post-scholarship (Chesterfield and Dant 2013). On comparison to the attitudes of non-recipients, however, a much *lower* proportion of recipients had a positive disposition

toward the USA before their scholarship: most of the effect observed was the recipient group making up the gap between their initial disposition and that of the non-recipients. Over the same time period, non-recipients' attitudes had become more negative, but only slightly (Chesterfield and Dant 2013). Scholarships may positively shape opinion, but this could still imply only limited gains *overall* if the differing starting point of applicants is taken into account.

### 13.2.2   *Career Prospects*

Analyzing improvement in scholarship recipients' career prospects has both straightforward and complex dimensions, depending on how the concept of 'improvement' is framed. There is widespread recognition that international education can yield important 'positional advantage' within home country labor markets (e.g. Mellors-Bourne et al. 2015; Sin 2009), both where skill shortages are severe and where the domestic system lacks either capacity or prestige. Structural constraints on career progression in certain organizations are also closely tied to qualifications: the importance of gaining a doctorate in the career development of academic staff is a pertinent example. Consequently, a credible contribution to career prospects can be garnered both through accrued positional advantage from international education generally and the instrumental value of qualifications specifically.

There is much strong evidence that the professional position of scholarship recipients *does* improve in this way. Two examples from differing scholarship models can illustrate. In tracer survey results for Asian Development Bank (ADB) scholarship recipients, 87% reported that their careers had been advanced by gaining a degree though the program: through promotion either within the same organization or at a different organization (ADB 2007). These findings are echoed across DAAD's various scholarship programs. For DAAD scholarships to Kazakh recipients, for instance, 80% of survey respondents agreed that their professional position had improved because of the experience they gained in Germany (Raetzell et al. 2013).

Not all types of advancement are equally forthcoming. The World Bank Institute (2008) has suggested that salary gains may be the least frequently experienced professional impact because many scholarship recipients return to public sector institutions with inflexible salary progression. This expectation is borne out to a lesser or greater extent in various analyses of career trajectories, depending somewhat on the socio-economic and political system of the home country. For instance, only around half of Atlantic

Philanthropies—University of Queensland Scholars returning from Australia to their employment in Vietnam received a salary increase, but by 12 months' post-scholarship, over three quarters had received some form of promotion and associated new responsibilities (Grigg 2016). In Cambodia, alumni of Australian government scholarships secured income through additional employment outside of their primary civil service posts: few remained committed to their pre-scholarship careers within the public sector (Webb 2009).

Despite the broadly positive tenor of evidence on career advancement, findings from tracer studies are rarely able to offer a rigorous and compelling commentary on career prospects. In general, career outcomes are likely to become more favorable as time elapses and recipients have more years of experience to progress in the labor force. This 'normal growth' can be a problem for one-off evaluation studies because career progression is correlated with years of workforce experience for *both* scholarship recipients and non-recipients. The most important and widespread deficit, however, is the absence of comparison to employment patterns within home countries. The proportion of recipients currently employed, for instance, is often used as a basic indicator of career outcomes and is near-universally high (e.g. SIU 2015). Yet because this data is not benchmarked against employment statistics for similarly skilled workers within home countries, it is difficult to establish what, if anything, employment rate statistics tell us about scholarship outcomes. Country-wise benchmarking in evaluation studies is often difficult because of limited statistical data, but two potential alternatives have been used: counterfactual comparisons and comparisons within study cohorts. The most recent evaluation of the US LAC Programs, for instance, demonstrated that recipients were more likely to be in professional leadership roles and to aspire to own or run a business than their non-recipient peers (Chesterfield and Dant 2013). A cognate finding by DAAD indicated that 70% of scholarship-funded alumni currently held management responsibilities, compared to 59% of self-funded students on the same postgraduate courses (DAAD 2013). More generally, however, both comparative research examining differential outcomes between scholarship recipients and non-recipients, and baseline to follow-up comparisons for recipients, has been critically scarce.

Finally, the early-career experiences of recipients have attracted attention within evaluation studies; difficulties in this period can reduce the impacts of scholarship programs. DAAD (2013), for instance, has observed that some scholarship recipients found their home university infrastructure to be

unconducive to continuing sophisticated research. Researchers from the Asian Development Bank (2007) have described this in terms of the 'absorptive capacity' of organizations to productively integrate new expertise from returning scholarship recipients. A useful extension on this concept can be drawn from Kalisman's (2015) historical analysis of scholarship students at the American University of Beirut. Absorption of new knowledge and practices is not only constrained by instrumental or interpersonal factors, it is also predicated on a common epistemic basis for change. This latter foundation is not guaranteed when scholarship recipients undertake study grounded within radically different social, civic, and economic systems. Scholarship recipients advocating teaching methods grounded in Deweyian thought, for instance, found significant philosophical resistance in the early twentieth-century mandate governments of Iraq and Palestine (Kalisman 2015).

These theorizations illustrate the extent to which career impacts are contingent outcomes and must be assessed within a broader context. A plausible case for the contribution of scholarships must account both for the impact of the degree and support network gained during international education, and influential exogenous factors, such as the structure of labor markets, the consequences of future mobility, and so forth. To comment on these factors, it is necessary to raise our focus to meso-level effects on organizations.

## 13.3   Meso-level Effects

Not all scholarship programs describe their aims in terms of improving the capacity of institutions, but almost all desired outcomes are reliant on individuals shaping institutional development and outlook. Institutional capacity improvement through funding individuals is an outcome contingent both on the efficacy of those individuals to instigate change and on the responsiveness of the home country institutions to incorporate change (the 'absorptive capacity' noted above).

Evaluation research to date has reported many compelling cases in which institutional capacity has been greatly enhanced by the actions of a scholarship program. It has also made relatively strong arguments for the virtues of clustering scholarships to achieve synergistic effects, although largely in absence of, rather than in superiority to, a contrary argument. Research is less clear, however, on how institutional capacity gains are achieved by individuals within organizational systems, what common situational factors

are present when best effects are realized, and how, if at all, funders can offer post-scholarship support to their alumni which will help to enhance organizational impacts. Examining these points in detail requires exploration of two issues: (1) the relevance of programs studied and (2) the relationship between institutional capacity, individual mobility, and critical mass.

### 13.3.1   Relevance to Employers

The perceived alignment between scholarship-funded study and employers' needs is relevant both to individual career prospects and to the organizational impacts of scholarships. The most widely available evidence of the latter is through workplace application of the skills gained by recipients whilst on scholarship. Nearly all participants in an evaluation of the ADB's Japan Scholarship Program (JSP) felt that the knowledge and skills gained through their studies were relevant and useful in their organization (ADB 2007). Similarly, 77% of DAAD scholarship holders reported a close match between the content of their academic studies and their current occupation, compared to only 63% of self-paying students that undertook the same courses (DAAD 2013). As with other comparative evidence, these results should be considered indicative, rather than conclusive. The researchers do not offer an explanation for the reported discrepancy, but a plausible supposition is that DAAD scholarship holders have been more successful in securing employment related to their studies than their self-funded peers. A different explanation, however, is that fewer self-funded students on the same courses elect to remain in employment sectors linked to their field of study, as distinct from being 'forced out' by lack of meaningful job opportunities. Expanding analysis to examine and theorize the differences between scholarship-funded and self-funded students would be a productive next step for the cases in which such differences have been identified.

Although published evidence is very limited, organizational participants in sending countries have tended to espouse views about the relevance of scholarship programs that support the evidence from individual recipients. Comments from a review of the Japan-IMF Scholarship Program for Asia (JISPA) are representative: 'Of the 24 sending agencies that responded to the survey, all considered the program to be meeting their capacity building needs, and said that they would in the future either encourage or strongly encourage junior staff to participate...' (Nijathaworn et al. 2009, p. 4). Research on the Netherlands Fellowship Program has found that both scholarship applicants and their employers were motivated by similar

prospects: skill development, improved quality of services, and innovation at the institution (van der Aa et al. 2012). Interestingly, the same evaluation indicated that scholarships would not be the preferred capacity-building instrument for many employers, but they felt compelled to support applications to not hinder an employee's career opportunities (van der Aa et al. 2012). Organizational needs may thus not wholly explain why employers support scholarship programs.

Nor are organizational needs static. The JISPA review indicated that, after running for almost two decades, the training needs of participating countries—especially the 'transition economies' of the early 1990s—had changed considerably (Nijathaworn et al. 2009). Norad (2009) has raised a similar point at the institutional level, commenting that there was strong feeling among some universities that investments needed to shift away from activities the university itself could now routinely manage and toward contemporary concerns, such as doctoral training. Questions of relevance are thus bound up with the responsiveness of policy-making organizations to the needs of their target groups, although an additional complexity is that there is no guarantee that the aims of governments, organizations, and individuals will necessarily be aligned.

For the scholarship programs that aim at building technical skills, there is ample evidence that expertise is usually relevant to the organizations to which alumni return. The skills later applied in home country institutions also extend beyond subject expertise and include a variety of soft skills and non-disciplinary competencies. As one Commonwealth Scholarship recipient remarked: 'There are many things that I gained, apart from the academic side of the programme – running of departments, running of facilities and, in general, running of the school – which have been of great use to me' (Hinz et al. 2013, p. 28). Some questions remain unanswered about the capacity of organizational systems to integrate recipients with highly specialized knowledge. Evaluation of DAAD's educational cooperation programs, for instance, concluded that funding advanced scientific study in Germany facilitated access to expertise and technology unavailable in home countries (Raetzell et al. 2013). In doing so, however, some individuals began advanced scientific research in Germany that they could not continue upon returning to their home country because they still lacked the available expertise and resources. Providing access to equipment, expertise, and advanced scientific practices can thus have unforeseen consequences: scholarships may be relevant as tool to offer access to

resources, but they may also build skills that are largely unusable in the home country context.

### 13.3.2  Institutional Capacity, Individual Mobility, and Critical Mass

Institutional impacts from scholarships are also tied closely to recipients' decisions about the organizations for which they choose—or are mandated—to work. In Chap. 9, Campbell has discussed the complexities of such decisions in detail. Indicative of the variation observed is the range of 13% to 81% of Commonwealth Scholarship recipients between 1960 and 2012 that returned to their prior employer, depending on their previous circumstances and route into the scholarship program (Mawer 2014). Many scholarship recipients have also subsequently moved organizations to advance their career (SIU 2015). Within some programs—especially those funded by European governments—scholarship recipients are middle managers, not entry-level staff, and so departure by these employees may be particularly troublesome for organizations (DAAD 2013). Even when recipients do return to their home country, or intra-country region, they do not necessarily return to the same employer (Chesterfield and Dant 2013). The function of scholarships to widen individual career options can thus cut both ways for programs also aiming at institutional capacity development.

Concerns about individual mobility apply primarily if institutional capacity is conceived at the level of specific organizations, but not necessarily at the level of the broader sector. Van der Aa et al. (2012) found that the loss of trained employees to other institutions could limit institutional development for the original employer, but since they typically stayed within the home country, there was still a net gain from scholarship recipients. A similar argument could also be made for cases in which recipients have left (or never returned to) their home country, but are highly active in diaspora links to home country institutions (see Chap. 11). Individual mobility does not necessarily act to diminish institutional capacity improvement at a systemic level unless the outcome of institutional capacity building is conceived in terms of impacts on specific organizations. This is not, however, an unreasonable or uncommon goal, particularly when working with civic institutions such as the police force or other public administration officials. In these cases, scholarship recipients who leave to work in higher education or the private sector would be unlikely to improve the institutional capacity

within the targeted civic institutions: these individuals would be leaving 'the system'.

A further systemic issue is the effect of diffusion and concentration of scholarship recipients across organizations, sectors, and countries. Following the premise that clusters of individuals may yield a critical mass that can work synergistically to achieve greater institutional impacts, some scholarship funders (e.g. DAAD; The World Bank) have sought to facilitate clustering and to build centers of excellence. The World Bank Institute has argued that '...the [Joint Japan/World Bank Scholarship Program] has created clusters of alumni who return home to work in the same institutions, thus helping to build a critical mass of well-educated staff and managers who can bring about institutional reform' (2008, p. 14). DAAD (2013) have made a similar case concerning their work with the College of Basic Sciences at the University of Nairobi, at which half of the staff had received qualifications through DAAD programs. Current discussions of critical mass tend to be focused on universities and the public sector. For many extant scholarship programs, this is readily explainable by recipients often having already established careers in the public sector or academia prior to their scholarships (e.g. Nijathaworn et al. 2009). Another explanation, ventured by Raetzell and colleagues, is the lack of collaborative support outside of higher education institutions: 'In the business and public sectors, DAAD alumni are usually lone warriors who receive little support from their managers' (2013, p. 42). Clustering of scholarships varies by program, and thus the same thesis may be advanced, mutatis mutandis, for public, private, non-governmental, or even academic sectors in differing circumstances.

Critical mass might also be conceptualized as the influence of alumni networks within geographical spaces, rather than of alumni clustered within specific institutions. Campbell (2016) has explored the role of such networks in Georgia and found that they can provide a dynamic resource for both intellectual and practical collaboration. As Campbell puts it: '...alumni networks embodied a "critical mass" that was leading change in the country, with alumni organizations serving as activity hubs' (2016, p. 10). Considered in this way, critical mass may still be created among 'lone warriors' if alumni networks are sufficiently vibrant and the socio-political environment facilitative. Yet there is limited evidence that alumni networks reliably fill this role across the broader landscape of scholarship programs. In the same study, for example, Campbell (2016) found that collaboration among scholarship program alumni in Moldova was widely desired, but little

realized: potentially due to the relatively low return rate of Moldovan scholarship recipients.

The impact of such individual mobility trends on attempts to create clusters is not well researched. At the institutional level, two hypotheses are plausible: (1) individual mobility away from institutions erodes critical mass by dispersing talent across a wider range of institutions or (2) individual mobility facilitates critical mass formation because highly regarded centers (e.g. the College of Basic Sciences) attract scholarship recipients and others to join them. Insufficient evidence is currently available to support either hypothesis. In practice, it is difficult to compare outcomes from clustering and diffusion of scholarship funding. The difficulties faced by 'lone warriors' (Raetzell et al. 2013) may be variously symptomatic of failure to adequately provide post-scholarship support to consolidate gains and (or) the inherent difficulties of the pioneering role that leaders often assume. Both hypotheses above also leave open the possibility that critical mass can be either planned or serendipitous: envisioned by program designers or an emergent outcome within certain socioeconomic contexts. Whether designing critical mass at the program level ultimately yields greater net gains for institutional development than supporting lone pioneers to generate their own critical mass is not currently clear, suggesting this may be a fertile topic for further research.

## 13.4   MACRO-LEVEL EFFECTS

Measuring the societal impacts from scholarship programs is a tremendously complex exercise. Even the definition of 'social impact' is a subject of considerable theoretical and practical complexity, as Joan Dassin and David Navarrete explore in the next chapter. Claims regarding impacts within societies or on international relations tend to be the most susceptible to problems of attribution: a difficulty of 'aggregating up' from the level of individuals to much broader social levels. Some evaluation studies (e.g. van der Aa et al. 2012) have distanced themselves from analysis on societal-level outcomes for lack of a sufficiently rigorous evidence base. Most research, however, has attempted to provide commentary on societal impacts, focusing primarily on intermediate outcomes around employment trajectories and using illustrative examples of how these may 'spill-over' into broader impacts. The types of macro-level topics on which evaluators have typically sought to offer comment are twofold: (1) socio-political, economic, and civic development within home countries and (2) impacts on international relations and public diplomacy. This section will consider each in turn.

### 13.4.1    Socio-political, Economic, and Civic Impacts

Much of the research on scholarship outcomes has shown that the work in which alumni are involved is often either directly or indirectly related to the social and economic development of their home country. Many unambiguously beneficial outcomes have been generated by idiosyncratic initiatives in home communities, as the array of compelling case studies in Mansukhani and Handa's (2013) analysis of the Ford Foundation International Fellowship Program (IFP) in India illustrates. Scholarships are demonstrably effective in these situations because they empower individual pioneers who generate catalytic effects on an ad hoc basis. Assessing whether these are normative program outcomes is more complex, both because counterfactual research is scarce and because idiosyncratic 'pioneering' activities are difficult to compare across the contexts in which they emerge.

More systematic evidence available tends to be positive, but lacking in analytic depth. Almost 85% of respondents in a World Bank Institute (2008) study indicated that at least half of their regular work was related to the development of their home country. Mawer et al. (2016) reported that around a third of survey respondents believed they had influenced government policy, whilst approximately two-thirds had influenced socioeconomic activity. The Norwegian Centre for International Cooperation in Education [SIU] (2015) has also found similar experiences among Norwegian scholarship recipients, with policy-making contributions reported at international, national, and local levels. Even those in the diaspora can be contributing in this way: Marsh and colleagues' (2016) research on African alumni of US colleges indicated that approximately one quarter of alumni currently living outside of Africa were nonetheless employed in positions relating to African development. Notwithstanding these findings, it is difficult to establish whether recipients have made useful and sustainable contributions to their home countries without detailed analysis, usually only available through relatively limited country-level studies (e.g. Penny and Teferra 2010).

To understand the full scope for societal impacts it is helpful to map out the mechanisms through which they may be generated. Wilson (2015) has argued that scholarship programs have two main pathways to yielding broader impacts:

1. Either the individual recipient goes on to be disproportionately powerful in a personal capacity (e.g. as an elected official or senior administrator),

2. Or they otherwise exert a disproportionate influence on public opinion and the actions of others (e.g. as a teacher, journalist, or through public advocacy)

The first pathway is termed the 'elite multiplier' by Wilson (2015, p. 9): the second might reasonably be termed the 'catalytic multiplier'.

There has been ample evidence that scholarship alumni routinely hold leadership positions. In the most recent study of IFP alumni (Martel and Bhandari 2016), 79% of survey respondents held a senior leadership role in their employment or within volunteer work. Similarly, SIU (2015) reported that around 60–75% of graduates from two Norwegian scholarship programs now worked at ministry or other national-level appointments. Atkinson (2015) has noted that, in 2013, 20 alumni of a single US military exchange program were army or defense chief in their home countries, which included developing countries in South and Southeast Asia, Africa, and the Middle East. Holding high office does not guarantee influence on societal-level outcomes, but it may provide greater opportunity to influence policy and implementation. Helping alumni into leadership roles is not merely a prestige outcome for program donors. As Raetzell and colleagues' (2013) have observed, in some countries, it is difficult to lead change from the 'bottom-up' because organizational decisions are rarely taken by individuals, but rather at systemic level by, for instance, government ministries.

Spilimbergo (2008) has argued that elite leaders can positively influence democratic development if well exposed to democratic institutions during international study. A variant of this thesis, ventured by Atkinson (2010), is that reform of basic human rights may be less threatening and more likely to succeed if instigated by elites than when challenged by 'outsiders'. These are arguments for the importance of the 'elite multiplier' in the action of scholarships within social and civic reform. Conversely, there is evidence that civic impacts concerning democratization and engagement with political processes may be driven by the 'catalytic multiplier' as easily as the 'elite multiplier'. Pfutze (2012), for instance, has found a relationship between higher emigration within Mexican municipal regions and greater likelihood of a breakthrough opposition party victory in elections. Similarly, Chauvet and Mercier (2014) offer evidence both for a positive impact on the electoral process (e.g. participation, competitiveness) in Mali from migrants returning from non-African countries, and for the transfer of political norms to other (non-mobile) residents. These are examples of diffusion effects that fit with the 'catalytic multiplier' for broader impacts. It is difficult, however,

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to isolate the specific role of scholarship funding, beyond contribution to the general trends linked with mobility and civic social change.

Notwithstanding Atkinson's (2010) argument, there is no guarantee that home country governments would be amenable to socio-political interventions by scholarship recipients. Kalisman's (2015) account of scholarship recipients at the American University of Beirut becoming increasingly politicized and, in some cases, viewed as a subversive force by their sponsor government is a vivid illustration of such socio-political vagaries. We can at least say with some certainty that the socio-political structure of the host and the home country is likely to shape the kinds of societal effects that emerge from scholarship programs (Scott-Smith 2008).

### 13.4.2    *International Relations and Diplomatic Impacts*

International relations and political ties are similarly complex, making analysis of impacts from scholarship programs difficult to define and detect. There are too many contingencies to claim a *decisive* political effect for scholarship programs (Scott-Smith 2008). Rather—and the like socio-political, civic, and economic impacts—we can reflect on the weight of any supporting evidence for the two primary mechanisms through which diplomatic impacts may accrue: the 'signaling' of goodwill through the establishment of a program and the activity of the program and its alumni.

Signaling goodwill through the creation of a scholarship scheme is effective, if at all, at the inception of a program: further investment—unless very substantial—is unlikely to increase its political impact (Wilson 2015). Retrenchment or winding up, on the other hand, has the potential to generate significant negative signaling and, perhaps for this reason, public diplomacy-oriented programs are frequently some of the longest running. Few, if any, analyses have been conducted on the signaling impacts of scholarship schemes, and it is not clear how they could be measured. One potential tool may be to gauge the political fallout from non-renewal of scholarship programs. In recent incidences, however, winding-up of scholarship programs has tended to be either as the result of a planned endpoint (e.g. IFP) or has been followed by reinvestment in new schemes with much the same participants. The withdrawal of Australian and Canadian support for the Commonwealth Scholarship and Fellowship Plan (see Kirkland), and expansion and retrenchment of Australia Awards in Latin America (see Kent), however, are relatively current case studies in which the impact on international relations has been understudied.

Recipients' activity during and after scholarship programs is the second major pathway to influencing international relations. Individual alumni, for instance, readily report forming and maintaining persistent ties with their host country (e.g. Nuffic 2009), and counterfactual evidence suggests they are more likely to maintain international contacts than non-recipients (Chesterfield and Dant 2013). Soft power-oriented scholarship programs also frequently claim significant impact from shaping well-disposed future leaders, given the potential for those individuals to influence diplomatic, trade, and military agenda (Kent 2012).

Beyond citing lists of famous alumni, scholarship research has done little to evidence this link, and nor does the relationship appear to be straightforward. Dreher and Yu (2016) have investigated the dual influences of 'affinity' with former host countries and the need to demonstrate political 'allegiance' to home countries among internationally educated leaders of 'non-industrialized' countries. Examining voting patterns at the United Nations General Assembly (UNGA) between 1975 and 2011, Dreher and Yu (2016) show that the leaders were *less likely* to vote concordantly with their former host country, but *more likely* to vote in line with other industrialized countries generally. Forthcoming elections at home also influenced leaders toward voting *less* concordantly with their former host country (Dreher and Yu 2016), suggesting that, at least in this highly public arena, concerns about demonstrating political allegiance can trump feelings of affinity. The impact of internationally educated leaders on economic ties is similarly complex. Using data on foreign direct investment flows, Constant and Tien (2010) have demonstrated that an internationally educated leader is positively associated with higher foreign direct investment for African countries, but only when such flows are already relatively high: there was no effect of internationally educated leaders for countries with low existing investment. Although the absence of clear evidence does not imply the absence of an effect, we should certainly treat claims about the impact of scholarships on high-level political relationships and 'trendsetting' effects on trade as tentative.

More generally, expecting individual ties to shape international relations requires heavy reliance on Wilson's 'elite multiplier' since those individuals would need to be in influential positions domestically. Most scholarship recipients—even given the evidence on leadership activities (see Chap. 9)—are unlikely to be able to shape diplomacy directly, especially at the level of fora such as the UNGA. Given the limitations of personal relationships and direct action by alumni, it may be useful to distinguish between the

connections formed by organizational participants and by individual recipients. Among organizations participating in the JSP, for instance, 79% reported that scholarships had contributed to stronger partnerships between Japan and developing countries (ADB 2007). Institutional partnerships can be important both for their signaling effect and the opening of alternative avenues for dialogue and collaboration, outside of the official foreign policy space.

A similar thesis also underpins science diplomacy—the influence of channels of scientific exchange and cooperation on political dialogue—which shares a common history with scholarship programs: the influence of cold war academic exchanges (see Tsvetkova 2008) is one of several examples. Fostering ties between host and home country academics has generally been more successful than between corporations or government departments (Raetzell et al. 2013), and tangible academic outcomes—primarily joint research and publications—have been reported by some scholarship programs (Mawer 2014). However, evidence on the efficacy of such research partnerships is not always conclusive. Partnerships between Norwegian institutions and institutions from Quota Scheme-eligible countries increased during the program, for instance, but DAMVAD (2012) found that increases were concentrated at institutions that tended to nurture such relationships anyway and the Quota Scheme had relatively little additional effect.

As might be expected, the evidence-base for scholarships shaping international relations is somewhat more a charting of pathways for *possible impacts* than an accounting of *actual impacts*. In this domain, perhaps more than others, we need to temper our expectations of detailed evidences. The signaling impact of scholarships as traditional diplomatic tools is very difficult to establish. Academic connections potentially contributing to science diplomacy are more readily assessed, but their impact at the level of international relations is nearly impossible to quantify. Finally, the influence of powerful individual alumni—heads of state, for instance—is more straightforward to demonstrate, but ascertaining the contribution of a scholarship (perhaps decades prior) to actions whilst in office is highly problematic.

## 13.5   FINAL COMMENTS

What, then, do these findings tell us about the overall impact of international scholarship programs? The evidence that recipients experience personal development and professional success is abundant. This is perhaps

most clear where there are structural constraints to progression, such as the need for a doctorate to gain promotion in a local higher education institution. Whilst these outcomes are rarely the headlines of evaluation reports, scholarship programs are almost invariably successful at helping individuals to overcome such constraints because completion of a formal qualification is the main (or only) requirement. In other instances, scholarships facilitate professional advancement by building technical expertise, generating positional advantage for the recipient, or both.

Whether scholarship programs can offer these benefits perpetually is unclear. As recipient country education systems become more well-resourced, and well-regarded, it is likely that some proportional erosion of the positional benefits gained from studying abroad will be observed. Research with South African doctoral graduates, for instance, has indicated that it is the high caliber of the candidates attracted to prestigious foreign PhD programs that is most influential on their future outcomes, rather than a quality difference between the courses studied at high-tier local and foreign institutions (Barnard et al. 2016). It is also important to consider that positional advantage is zero-sum: scholarship recipients hold positional advantage to the detriment of others. When recipients are selected from under-represented or marginalized groups, the effect is rebalancing, but if scholarships are targeted at elites, there is a significant danger of further entrenching existing inequities. One quandary with which ethically sensitive program designers must contend is establishing the balance between influencing change within and through elites, while not simultaneously perpetuating social and economic exclusion.

Evidence on *what* outcomes are achieved by scholarship recipients is often much clearer than on *how* they are achieved. At the individual level, the pathways from funding to positive outcomes are relatively more clear and the evidence-base stronger. Alongside these pathways are greater ambiguities, such as how individual capacity and career progression is embedded in systemic institutional impacts, and how individuals with a positive disposition generate soft power outcomes and stronger bilateral relations. The transfer of individual benefits to the broader levels of institutions and societies is widely hinted at, but rigorous evidence is scarce. Institutional outcomes are more varied than individual outcomes, and contingent factors play an important role in mediating the impacts of scholarships. The 'absorptive capacity' of institutions themselves is crucial, and the results of clustering scholarships within institutions with high absorptive capacity have frequently been encouraging. Yet pioneering social change will not always

be possible within the elite structures of high-prestige research centers or government departments, and thus the efficacy of clustering is likely of more interest to technical capacity-building programs than social equity-focused programs.

From a broader view, both evaluation research and advocates for scholarship schemes have convincingly argued that recipients often undertake subsequent works of public importance. These activities span governance, social and private entrepreneurship, and human development in nearly all fields of endeavor. Additionally, some potentially profound impacts have received less attention than they merit. The influence of the scholarship period on the family of sojourners, for instance, is rarely considered in evaluation. Scholarships to parents of school-age children regularly immerse future generations in the educational milieu and associated socio-cultural perspectives of the host nation (Atkinson 2015; Purdey 2015). This widening of the 'unit' of activity—from individual scholarship recipient to their family and children—routinely goes unstated in evaluation research and may be one of the more important 'hidden' effects of programs.

Ultimately, scholarship programs may lay credible claim to many successes, but discussion concerning which outcomes are idiosyncratic and which are normative remains nascent. The accounts of individual alumni frequently included in evaluation reports are, almost by definition, the exceptional cases: it is unclear to what extent evaluators believe (or should believe) these 'star performers' are illustrative of the broader outcomes of the program. This is perhaps the most significant shortcoming of the research field at present. Like all public policy tools, it is imperative to understand what we should expect from international scholarship programs and what outcomes, however beneficial or impressive, should be considered unintended consequences. The state of research on scholarship outcomes provides a basic evidence-led framework for those expectations, but *only* a basic framework: detailed commentary on complex questions about scholarship outcomes has frequently been beyond the purview of evaluations commissioned for single programs. If it is to address some of these complexities, then scholarship research *must* evolve beyond its foundations to include sustained, comparative, and detailed attention from a community of researchers. The impact of scholarship programs is not solely the calculus of efficiency and effectiveness for individual grant-making bodies; it is a common heritage from decades of public policy implemented in almost every country of the world.

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