

The Impact of Yoga on the Well-being of Alexandra's Youth

An interdisciplinary study on the impact of Yoga4Alex on the
current well-being of Alexandra's youth, in the context of
South Africa

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Preface

This thesis was inspired by Yoga4Alex and the incredible work they do. The positive impact they have on their students made all of us excited to study how exactly Yoga can improve the well-being of youth. We want to thank Yoga4Alex for letting us be part of their journey.

We also want to thank our disciplinary advisors for their disciplinary guidance. It was truly greatly appreciated.

The supervisor deserving a special thanks is our thesis supervisor Dennis. Thank you for your support, your tips, and all your help in guiding us through the intricate interdisciplinary process. We feel very lucky that we got an expert on Yoga as our thesis supervisor for our Yoga thesis.

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Warm regards,

Fabienne, Myrthe, and Eva

Abstract

Youth growing up in impoverished areas of the world, such as Alexandra township, have a severe lack of well-being. Yoga4Alex teaches Yoga to improve the well-being of youth. Yoga4Alex believes that the practice of Yoga positively impacts educational success, employment opportunities, and in the long run contribute to breaking the cycle of poverty.

This thesis's research question is: How is Yoga able to impact the well-being of youth in Alexandra township? Gaining new knowledge on the impact of Yoga on the well-being of youth can help to develop further comparable initiatives around the globe to support youth in similar contexts like the South African townships. This thesis answers the research question using insights from the disciplines of Philosophy, Interdisciplinary Social Sciences, and International Development Geography. Their insights are integrated using Repko and Szostak's Interdisciplinary research process (2016).

The intervention of Yoga can shift the cycle of poverty towards a cycle of prosperity, because Yoga can positively impact the well-being of youth. This impact increases the chances of educational success in the short term. In the long run, the intervention of Yoga can provide a steppingstone towards prosperity for an individual and hopefully, the community of Alexandra. However, further research is needed on Yoga as an intervention - aiming to improve well-being - in order to understand the interplay between different indicators of well-being and their impact on reducing poverty, and thus increasing prosperity.

Youth, well-being, poverty, Yoga, Kundalini Yoga, Alexandra, South Africa

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Introduction

By offering Yoga¹ lessons to students in the Alexandra township of Johannesburg in South Africa, “Yoga4Alex’s vision is for young people to break out of the cycle of poverty² [...] through the medium of Kundalini Yoga³” (Yoga4Alex, 2018). Townships⁴ in South Africa have been faced with the challenge of persisting concentrated poverty (Scheba & Turok, 2019). According to Scheba and Turok, one of the general characteristics of townships besides poverty is the high levels of unemployment (2019). In early 2020, president Ramaphosa addressed youth unemployment as “the biggest problem in our country” to the National Assembly (Meyer, 2020). Unemployment is both the result as the cause of poverty, and is therefore not an individual, but collective issue (Cloete, 2015). “Yoga4Alex is on a mission to create opportunities for unemployed young people to gain a deep understanding of their own self-worth and to recognize their own potential through the practice of Yoga” (Yoga4Alex, 2018). High dropout rates and repeated retention are common in secondary schools in South African townships. These at-risk learners consist of 80% of the total enrolment in elementary and secondary education. Approximately only 60% of these students complete Grade 12, while the remaining 40% drop out after repeated failure (Grossen, Grobler & Lacante, 2017). By offering Kundalini Yoga lessons to the at-risk students in the Alexandra, Yoga4Alex “equip[s] the students with tools to cope with stress and anxiety, thereby enabling them focus in both their studies and daily life” (Yoga4Alex, n.d.b).

According to the Global Youth Wellbeing Index, the national well-being⁵ of South Africa

¹ Yoga is a general term for amongst others the postures (*asana*) and the breath exercises (*pranayama*) associated with practicing Yoga today and has roots tracing back to ancient India where Yoga is one of six Hindu philosophical schools, encompassing an extensive philosophical cosmology illustrating the deeper practices of Yoga (Feuerstein, 2003).

² The cycle of poverty is a figure of speech depicting a “set of factors or events by which poverty, once started, is likely to continue unless there is outside intervention” (Anson, Broers, & Tritton, 2000).

³ Kundalini Yoga is a branch of the Yoga school of Hindu philosophy and focuses on drawing the ‘sleeping serpent’ (*kundalini*; the life energy based at the end of the spine) upwards. By doing so, suffering is attempted to be eliminated; enlightenment being the ultimate stage of this yogic practice (Feuerstein, 2003; Pandit, 1993).

⁴ Townships are outer districts in South African cities. These districts were during the Apartheid designated to segregated public-housing estates for ‘nonwhites’. After the Apartheid, the racial settlement patterns persisted (Nel, Mabin & Lowe, n.d.). Likewise, the history of poverty and overcrowding endured (Mbokazi, 2016).

⁵ Wellbeing is a multifaceted phenomenon that can be assessed by measuring both subjective and objective constructs, like (Anand, 2016) physical health, mental health, educational status, economic status, physical safety, access to freedom, and the ability to

is at the lower end of the Index's youth well-being ranking (Sharma *et al.*, 2017). Yoga4Alex's core is trying to address the issue of poor well-being. "Yoga4Alex was born out of the desire to address the physical and mental needs of at-risk youth in Alexandra" (Yoga4Alex, n.d.c). Research shows that a student's well-being directly impacts their performance in school (Chambel & Curren, 2005; Guarnizo-Herreño & Wehby, 2012). Therefore, preventing and treating low well-being can improve youth's academic achievements (Guarnizo-Herreño & Wehby, 2012). Subsequently, decreasing the dropout rates and increasing the number of graduated students in the short term can reduce the unemployment rate in the long term (Grossen, Grobler & Lacante, 2017). The practice of Yoga functions as an instrument in the improvement of well-being, for example, by reducing stress levels and leading the way to peace of mind (Riley & Park, 2015; Feuerstein, 2008). Yoga4Alex is on a mission to enable "youngsters to break out of the cycle of poverty by learning to take thoughtful control of their bodies and choices" (Yoga4Alex, n.d.a). By analyzing this impact, the instrumentality of Yoga could be a phenomenon empowering youth around the globe.

To fully establish an understanding of the possible impact of Yoga on Alexandra's youth, this thesis will examine the effects of Yoga on the well-being of youth. Therefore, the research question is: *How is Yoga able to impact the well-being of youth in Alexandra township?* Gaining new knowledge on the impact of Yoga on the well-being of youth can help to further develop Yoga4Alex and comparable initiatives around the globe to support youth in similar climates like the South African townships.

The analysis of this impact contributes to the scientific debate on whether or not Yoga is an appropriate tool to positively influence one's well-being. For example, the western interpretation of Yoga and the yogic practice sometimes has barely anything to do with the original Hindu theory and practice, which gives cause to the debate on whether or not the positive influence of this Westernized practice could be claimed to be caused by Yoga (Ivtzan & Jegatheeswaran, 2015). Apart from its scientific relevance, this thesis also aids the needs of youngsters in environments like Alexandra, for the cycle of poverty is a global issue, like in Kenya, India, the UK and the USA (Giambrone, Cook-Cottone, & Klein, 2018, p. 167; Chaudry & Wimer, 2016; Kuruvilla & Jacob, 2007). South Africa scoring on the low end on the Global Youth well-being Index (2017) (twenty-

participate in civic life. In short, it is "the abundance or scarcity of opportunities available to an individual" (Sharma *et al.*, 2017). However, in Part I of this thesis, every discipline will apply its own disciplinary definition. In Part II one integrated definition will be u

second position of twenty-nine countries) proves that the issue of poor well-being of youngsters in South Africa is not yet resolved and illustrates the need for more attention to the youth. Therefore, this thesis could assist organizations in trying to overcome the issues of well-being, unemployment, and - in the long term - poverty. The potential of Yoga as a tool to stimulate the well-being of youth implies that this thesis could give cause to more initiatives in areas like South African townships to teach Yoga by means of breaking out of the cycle of poverty.

A Holistic Approach

To create a holistic analysis of the impact of Yoga on the well-being of youth in Alexandra, this research will be conducted according to Repko and Szostak's *Interdisciplinary Research Process and Theory* (2016). Repko and Szostak argue interdisciplinary research should meet several criteria. Firstly, a complex topic demands an interdisciplinary approach (Repko & Szostak, 2016). This thesis focuses on the complex issue of the well-being of South African youth; thus, this criterion is met. The reason for this complexity is due to the wide range of indicators that can influence well-being. Many factors, mental health, economic capital, and one's connection to their inner peace, can influence other factors like, emotions and the satisfaction of a person's life. Analyzing the impact of Yoga on well-being is, therefore, a complex task.

Secondly, a lack of well-being can be caused by several elements that are not restricted to just one discipline. These elements do not merely consist of one's social environment, but also cover their situation at home, repression by the government, their mental struggles, et cetera. Thus, there are insights from multiple disciplines needed in order to tackle problems surrounding poor well-being, which meets the second criterion of Repko and Szostak: important insights concerning the problem should be offered by two or more disciplines (Repko & Szostak, 2016).

Thirdly, due to these various factors and different disciplinary interpretations of well-being, no single discipline has been able to resolve the issue satisfactory, which is the second to last criterion of Repko and Szostak (2016).

Lastly, the problem analyzed in this thesis is an unresolved societal need or issue, which meets the last criterion (Repko & Szostak, 2016). As stated above, the persisting concentrated poverty in townships and its effects on the youth in such environments is a problem that has yet to be resolved.

For this thesis meets the four criteria for demanding an interdisciplinary approach, Repko and Szostak's interdisciplinary research method (2016) must be applied. The research question will be holistically answered using three different disciplines: International Development Geography (IDG), Interdisciplinary Social Sciences (ISS), and Philosophy.

Reader's Guide

This thesis is divided into two parts, with a total of six chapters. Part I consists of three disciplinary chapters in which each discipline contributes to the main research question by answering its disciplinary research question. Answering the research question will be achieved by combining the disciplinary insights as if it were a funnel: Philosophy will provide the broad, abstract context of the term Yoga, mainly focusing on the theory of Yoga. ISS will supply the bridge needed to move from theory to practice by breaking down how individuals are potentially positively impacted by Yoga within social constructs. IDG will finally analyze the actual context in which the practice of Yoga is potentially impacting the well-being of individuals. This creates a funnel-like disciplinary vision that moves from abstract theory to actual measurable impact.

In Chapter 1, the discipline Philosophy will focus on the most abstract perspective on Yoga, deciphering the underlying philosophy of Kundalini Yoga. Philosophy studies the fundamental questions underlying all reality and arguably beyond. It does so through thinking and analyzing critically and arguing rationally and logically (Honderich, 1995, p. 666). Philosophy is often thought of as a metascience, illustrating its overarching character. By thoroughly analyzing the Indian philosophical tradition, the deeper dimension of Kundalini Yoga is exposed. From within this fundamental philosophical background, the potential impact on the well-being of individuals will be assessed. The question that will be answered in this chapter is: 'What is the philosophy of Kundalini Yoga and how does it potentially impact one's well-being?'

In Chapter 2, the ISS discipline takes the stage with a slightly less abstract perspective. ISS is an interdisciplinary discipline in which theory meets practice: it seeks not only knowledge of societies, but it also wants to use knowledge to improve them. In order to truly understand societies and the individuals in them, ISS uses both quantitative and qualitative research methods. Since the discipline also has an interdisciplinary character, research will be done at the psychological, neurobiological, and sociological level to analyze how Yoga is able to impact youth's well-being.

It will do so by examining social theories on well-being and combining those with research experiments of Yoga's impact on physical, mental, and emotional well-being. This chapter's research question will be: how is Yoga able to impact the well-being of adolescents? An interdisciplinary analysis will provide insights that will be vital in explaining how Yoga is able to impact the well-being of the youth in Alexandra.

In Chapter 3, the discipline IDG will focus on Yoga4Alex as a Sport for Development intervention to improve the well-being of Alexandra's youth. The discipline IDG offers a postmodern perspective on the development of knowledge. Therefore, this chapter is based on the assumption that knowledge always depends on its context. As a social science, IDG views people as social creatures and therefore live in harmony or conflict (Scheepers et al, 2016). IDG tries to include this diversity of one's context. Therefore development includes numerous phenomena, like well-being. This chapter will create an on-the-ground understanding of the multiple aspects of the well-being of Alexandra's youth and the impact of the Yoga4Alex intervention, by answering the question: what is the impact of Yoga4Alex as a Sport for Development initiative on Alexandra's youth?

Part II, Holistic Approach, also consists of three chapters. In Chapter 4, the disciplinary insights will be integrated. This approach first demands to establish conflicts between the disciplines. These conflicts will be resolved by creating a common ground using Repko and Szostak's integration techniques (2016). The integration of these disciplines will pave the way to a more comprehensive understanding (Chapter 5) of how Yoga is able to impact the well-being of youth in Alexandra township. This will consequently provide the answer to the research question and enable a conclusion to be drawn. In the last chapter, Chapter 6: Discussion and Reflection, the research will be reflected upon, which entails a discussion and reflection on the research project.

Part I: Disciplinary Approach

Yoga is not a religion. It is a science, science of well-being, science of youthfulness, science of integrating body, mind and soul.

— Amit Ray

Chapter 1: Awakening the Sleeping Serpent: On How Kundalini Yoga Could Influence One's Well-being

Philosophy – Eva de Jong

Mere philosophy will not satisfy us. We cannot reach the goal by mere words alone. Without practice, nothing can be achieved.

- Sri Swami Satchidananda

Introduction

The effort of Yoga4Alex to empower and support the youth of Alexandra township to break out of the cycle of poverty through the practice of Kundalini Yoga is paying off in terms of the improvement of the general well-being of these youngsters (Yoga4Alex, 2018). The underlying thesis will assess the specific impact of Yoga on the well-being of youth, starting by investigating what lies underneath the practice of Yoga, for the practice primarily gives body to the theoretical foundation of Yoga. Therefore, the research question of this disciplinary contribution to the overall thesis is ‘What is the philosophy of Kundalini Yoga and how does it potentially impact one’s well-being?’

Defining Yoga is part of a distinct philosophical debate discussing the origin, content and essence of Yoga. The main difficulties of defining Yoga are the uncertainty about its actual origins (Jacobsen, 2005, p. 317) and the fact that its western interpretation often misunderstands its underlying traditional goals and purposes (Radhakrishnan and Moore, 1957, p. 453; Feuerstein, 2008, Chapter 4). To create a better understanding of Kundalini Yoga and its potential impact on well-being, the focus will be on its philosophical background, in which practice and theory are combined, and only authors with a scholarly background in Indian philosophy will be referenced.

Starting off with Samkhya philosophy, being the fundament of all Yoga philosophy, the needed philosophical background will be described. Forthcoming, an analysis of Yoga philosophy and Kundalini Yoga will provide the essential information to, lastly, be able to argue how the underlying philosophy of the practice of Yoga is able to positively impact one’s well-being.

Samkhya Philosophy

As stated before, the roots of Yoga are difficult to define. However, by analyzing its place within the Indian philosophical tradition, and thus focusing on the philosophy of Yoga, a more extensive understanding of this concept will be elaborated. The philosophical context of Yoga philosophy is defined by the Indian philosophical tradition (in Sanskrit referred to as *Darshana*, literally meaning ‘viewpoint’ or ‘vision’ (Radhakrishnan & Moore, 1957, p. 349; Feuerstein, 2008, Chapter 3)). This tradition consists of two schools: the heterodox school (*nastika*) and the orthodox school (*astika*) (Radhakrishnan and Moore, 1957, p. 350). The main difference between these schools is that the orthodox school acknowledges the Vedas and the heterodox school does not (Radhakrishnan and Moore, 1957, p. 350).

The Vedas are four large bodies of text, belonging to the oldest Sanskrit scriptures of India (Radhakrishnan and Moore, 1957, p. 3). Radhakrishnan and Moore (1957) argue that only the *Rg Veda* and the *Atharva Veda* are interesting for philosophers, for the other two, *Yajur Veda* and *Sama Veda*, deal with respectively sacrificial and magical formulas (p. 3). The *Atharva Veda* has predominantly been important for the development of medical science in India (Radhakrishnan and Moore, 1957, p. 3). So, when looking into Indian philosophy and its roots, the focus should mainly be on the *Rg Veda*, consisting of hymns, because “it’s indispensable for any adequate account of Indian thought” (Radhakrishnan and Moore, 1957, p. 3).

Returning to the bifurcation of Indian philosophy into the orthodox and heterodox schools, we shift our focus towards the orthodox school which acknowledges the Vedas. The orthodox school is also known as Hindu philosophy and consists of six *darshanas*⁶, or philosophical schools (Radhakrishnan and Moore, 1957, p. 350). Each school, Yoga being one of them, accepts the Vedas as authoritative and acknowledges the premise that *atman*

<i>Nyaya</i>	realism
<i>Vaisesika</i>	pluralism
<i>Samkhya</i>	rationalism
<i>Yoga</i>	practicism
<i>Mimamsa</i>	ritualism

Table 1: Six darshanas of Hindu Philosophy and their western counterpart.

(eternal self) exists (Radhakrishnan and Moore, 1957, p. 39). Apart from the Vedas, the Upanishads are of great importance to the Hindu philosophical tradition as well (Feuerstein, 2008, Chapter 5). As depicted in Table 1, Yoga is one of six Hindu philosophical schools and can be loosely translated as ‘practicism’ because of its relatively great emphasis on practice instead of theory.

⁶ “All logical attempts to gather the floating conceptions of the world into some general ideas were regarded as *darshanas*. They all help us to see some aspect of the truth” (Radhakrishnan and Moore, 1957, 349).

However, the practice of Yoga is fundamentally built upon philosophy, specifically the Samkhya school of Hindu philosophy (Radhakrishnan and Moore, 1957, p. 453). By understanding Samkhya philosophy, Yoga philosophy can be depicted and understood, as well as the practice of Yoga.

Samkhya philosophy, like the case for all Indian philosophy, is somewhat untraceable, meaning its origins are hard to capture (Johnston, 1937, p. 1-15). This is for one thing because this philosophy was transmitted orally long before anything was written down, and on the other hand because several allegedly important cryptic texts have gone lost over time (Johnston, 1937). However, Edward H. Johnston has provided a nuanced and inclusive essay on early Samkhya philosophy according to the historically important texts (1937).⁷ He emphasizes the fundamentally dualistic nature of the Samkhya philosophy (Johnston, 1937). This dualism consists of *purusa*, which can be understood as spirit (Klostermaier, 2007) or psyche (Johnston, 1937), and *prakriti*, which is most commonly seen as matter (Klostermaier, 2007; Johnston, 1937; Encyclopaedia Britannica, 2015).

The cosmology of Samkhya philosophy consists of this fundamental dualism of matter in which *purusa* makes the characteristics of *prakriti* its own, causing the evolution of the macrocosm and microcosm and resulting in the hierarchy that is the universe (Klostermaier, 2007). This asks

for some elucidation. The universe according to Samkhya ultimately involves twenty-four *tattvas*, or categories (Johnston, 1937, p. 252), supplemented with *purusa* as the twenty-fifth element (Klostermaier, 2007, p. 115). The twenty-four *tattvas* are divided into smaller categories as depicted in Figure 1.

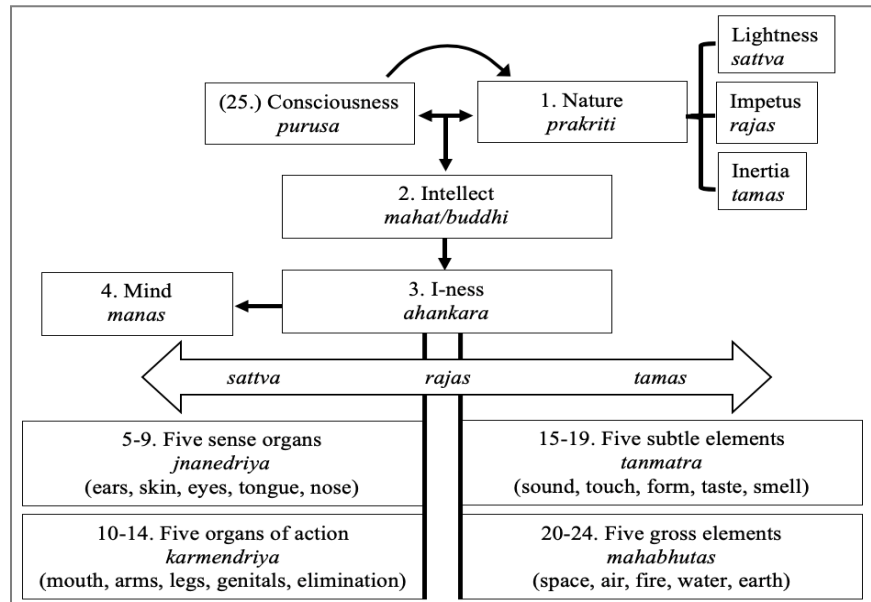


Figure 1: Cosmology of Samkhya Philosophy. Based on textual and schematic images by Johnston (1937), Klostermaier (2007), Radhakrishnan and Moore (1957), and Talwar (2001).

⁷ Johnston was part of the ‘Boden Professors of Sanskrit’ introduced by Oxford University to ultimately convert the residents of British India to Christianity. Even though Johnston’s title as well as the eventual purpose of his education are rather obscure, his essay on early Samkhya philosophy is very useful and – as I mentioned – very nuanced as well.

As portrayed in this figure as well, *prakriti* consists of three principles: lightness (*sattva*), impetus (*rajas*), and inertia (*tamas*) (Klostermaier, 2007, p. 115).⁸ These three *gunas*⁹ consequently make up all reality: physical and mental (Feuerstein, 2003, Chapter 53), and are continuously in imbalance, resulting in all movement and unrest (Klostermaier, 2007, p. 115). The three *gunas* give substance to all nature, including human beings: at birth one of three is dominant, and thus the imbalance is immediately present, resulting in a distinct personality type (Feuerstein, 2003, Chapter 32). The ultimate goal of human existence is *purusa*, being our true identity, and can among other ways be achieved by practicing Yoga (Feuerstein, 2003, Chapter 53). As stated before, the main goal of Samkhya philosophy – and all other Indian philosophies – is to get rid of all suffering inherent to the ever-changing world and caused by the interaction between *purusa* and *prakriti* (Klostermaier, 2007, p. 116). The schematic outline of this philosophy supposedly provides the potential to retrace the cause of suffering to its core (Klostermaier, 2007, p. 115; Feuerstein, 2003).

Yoga and Kundalini Yoga

The Yoga philosophy, being one of six Hindu philosophical schools just like Samkhya, mainly builds upon Samkhya philosophy, but also acknowledges other sources, such as *Vedanta* (Klostermaier, 2007, p. 114). As all orthodox schools have their own philosophical or spiritual scriptures (*sutras*), Yoga philosophy is elaborated in the *Yogasutras*, supposedly written in the fifth century C.E. by the ‘godfather’ of Yoga: sage Patanjali¹⁰ (Feuerstein, 1979, p. 3). In these *sutras*, the eightfold path¹¹ of Yoga is described and explained, which ultimately would lead to *samadhi*. It is also emphasized that ignorance is the greatest obstacle on this path to *samadhi* (Jacobsen, 2008, p. 12). “Ignorance [...] is thinking of the impermanent object as everlasting, the impure as the pure, misery as happiness, and the not-self as the self” (Jacobsen, 2008, p. 193). The fact that the eightfold path starts off with ten rules of *yama* and *niyama* is because of “[the fundamentality of] bodily and moral purity to our physical and mental health”: this purity creates the basis to eventually exercise the higher practices of Yoga (Feuerstein, 2003, Chapter 33).

The main difference between Samkhya and Yoga philosophy is the fact that though Yoga

⁸ Translated by Feuerstein (2008) to more current language as illumination, activation, and restriction.

⁹ “The word *guna* literally means ‘strand’ but has a wide range of connotations. In the context of Yoga and Samkhya metaphysics, the term denotes the irreducible ultimate ‘reals’ of the cosmos” (Feuerstein, 2008, Chapter 3).

¹⁰ Patanjali is often referred to as a myth, as there is no evidence of his actual existence (Feuerstein, 1989, p. 3).

¹¹ The eightfold path is illustrated in Table 5 in Appendix C.

builds upon the dualism of realities, *purusa* and *prakriti*, Yoga adds *ishvara* as a Godlike entity (Feuerstein, 2008, Chapter 3). Apart from this and some smaller differences, Yoga accepts all Samkhya philosophy, especially regarding the *gunas*. The unbalance of the three *gunas* results in the constant movement of the universe; the interaction of the three *gunas* results in all that is reality (Feuerstein, 2003, Chapter 58). This is essential to note, because this movement also causes all suffering in the world.

Within the Yoga school of Indian philosophy, Tantra Yoga is the branch of Yoga from which Kundalini Yoga has surged. Tantra Yoga is commonly mistaken for a sexual practice, but as with the common western conception of Yoga as well, this is an incomplete and inadequate interpretation of Tantra Yoga (Feuerstein, 2003, Chapter 69). The Tantra school of Yoga originally came about as a reaction to the decline of morality and spirituality, and intended to revitalize the yogic tradition (Feuerstein, 2003, Chapter 69). Around the 10th century C.E., Tantra Yoga led to the rise of Hatha Yoga, which subsequently is a form of Tantric Yoga (Feuerstein, 2003, Chapter 69). The awakening of the so-called serpent power (*kundalini shakti*) is the fundamental goal of both Yoga schools and is ultimately manifested in its own branch of Yoga practice, logically called Kundalini Yoga.

Kundalini is, loosely translated, ‘(the force of) the sleeping serpent’ located at the base of the spine in the human body (Pandit, 1993; Feuerstein, 2003). Author and teacher Madhav P. Pandit states that “by practicing Yoga, the sleeping Kundalini is awakened and drawn upwards” (1993, p. 51). The goal of this Yoga is to unify the body and the mind – specifically, to meld the power of the body into the power of the soul (Pandit, 1993, p. 50). Waking up the *kundalini* is a conceptual tool to ultimately reach enlightenment, or *samadhi* (Feuerstein, 2003, p. 362). All spiritual evolution is founded in this intangible instrument, according to Tantra, though not all schools of Yoga acknowledge this concept (Feuerstein, 2003, p. 362). This is largely because the Yoga school of Tantra did not develop until the fifth century C.E. and consequently is not mentioned in any of the prominent scriptures underlying all Hindu philosophy (Feuerstein, 2003, p. 362).

So why would one want to wake up this so-called ‘sleeping serpent’? This is embedded in the believed lay-out of the human body, combined with the two main components of the universe. These two components were previously explained as *purusa* and *prakriti* in Samkhya philosophy, but in Tantric terminology – which is much more spiritual because, as mentioned before, Yoga recognizes a deity – they are referred to as *shiva* and *shakti* (Pandit, 1993, p. 50). *Shiva* and *shakti*

give body to respectively consciousness in itself and consciousness as power (Pandit, 1993, p. 50). So essentially, both Samkhya and Tantric terminology refer to the same idea: this dualism makes up all reality.

Furthermore, *shiva* – i.e. pure consciousness – is located in the human body in the highest stage, and *shakti* – i.e. consciousness power – is located in the lowest stage (Pandit, 1993, p. 50). This stored power is believed to be curled up at the base of the spine and is therefore referred to as *kundali*, which is Sanskrit for being ‘coiled up’ (Pandit, 1993, p. 50). By practicing Kundalini Yoga this sleeping serpent (*kundalini*) is woken up, which is explained in a complex and much technical manner¹², and rises through the body while traveling through the *chakras*¹³ (Pandit, 1993, p. 57). This practice of leading the *kundalini* and *shakti* upwards is not merely done by maintaining several poses (*asana*) but involves all eight steps of the eightfold path. The answer to the question of why one would want to wake up the *kundalini* and draw it upwards purportedly lies in the ultimate stage of the eightfold path: eventually, after thorough practice, one would reach this transcendent stage (*samadhi*) and would be relieved of all presupposed suffering.

The potential impact on well-being

The influence on well-being Yoga could potentially have is best explained by conducting the same chronological order as before: starting off at the general ideas of Indian philosophy and working towards the eventual practice of Kundalini Yoga. It’s often said that all Indian philosophies strive towards gaining freedom from *duhkha*, or suffering (Klostermaier, 2007, p. 114). Specifically, in Hindu philosophy, of which Yoga is, thus, one of six schools of thought, the elimination of *dukkha* is ultimately attempted to be achieved. In more general terms however, all Indian philosophies use different words and formulations of this ultimate aim (Radhakrishnan & Moore, 1957, p. xxvi).

In Buddhism, for example, the term *nirvana* is used, generally translated as ‘liberation’ or ‘enlightenment’ (Feuerstein, 2003, Chapter 3 & 11; Radhakrishnan & Moore, 1957, p. 274). In Jainism, *moksa* is used as the word for – again roughly translated – ‘liberation’ (Radhakrishnan & Moore, 1957, p. xxvi). The formulation of ‘liberating man from his suffering’ is negatively formulated, but in reality still depicts the positive achievement of liberation, enlightenment, or infinite bliss (Radhakrishnan & Moore, 1957, p. xxvi). In a theory incorporated in the Upanishads,

¹² For further reading, see: Pandit, 1993, Chapter 6.

¹³ For an illustration of these energy centers in the human body, see: Image 1 in Appendix C.

four stages of knowledge are presupposed, with the fourth and final stage (*turiya*) being the true nature of the Self: immortal, blissful, and independent (Klostermaier, 2007, p. 105-106). In Samkhya philosophy the unification of *purusa* with *prakriti*, or in Yoga philosophy similarly the unification of *Shiva* with *Shakti*, ultimately leads to eternal bliss (Klostermaier, 2007, p. 85).

Recognizing the similarities between these different examples of formulations leads to the understanding that, as mentioned before, the goal of all Indian philosophies is roughly the same but should not be depicted by a single word or formulation, for that would not cover the inclusivity of this general goal. The most important thing that should be used for answering the main question of this thesis, is the formulation of the elimination of all suffering.

When looking specifically into Yoga and its philosophy, all suffering is argued to be caused by being out of sync with reality (Feuerstein, 2003, Chapter 21). *Yatha bhuta* is essential in this conception, depicting that enlightenment is “accepting reality as it is” (Feuerstein, 2003, Chapter 21). This is, however, not something one can strive towards: Feuerstein writes “To remember to be present as the body is a skill that can be learned to *be* presently happy rather than to seek to *become* happy is an open option for all of us – in every single moment” (2003, Chapter 22). A presupposed state of ultimate well-being could thereby be described as not something one can achieve, but a state that’s already present and can be uncovered by accepting reality as it is. This state of being – which is essential to Yoga – is also called *samadhi*, which is “an alternative mode of experiencing to our day-to-day consciousness in which subject and object are always distinct” according to Feuerstein (1989, p. 37). This, once again returning, dualism is overcome in entasy – as opposed to extasy – as it were experienced from within (Feuerstein, 1989, p. 37).

Continuing with the specific practice of Kundalini Yoga, when the awakened *kundalini*, or serpent power has, after working its way upwards, fully molded the physical body into a so-called body of light¹⁴, a state of enlightenment or liberation is allegedly achieved – this being the ultimate spiritual goal in this philosophical framework. According to the overarching school of Hatha Yoga, in which the *kundalini* is thus manifested as well, its practice attempts to “harmonize the individual breath with the Cosmic Breath” (Pandit, 1993, p. 48). This is believed to lead to stimulation of strength and health, resulting in the perseverance of mind and concentration.

In short, the intention of the underlying philosophy of Kundalini Yoga gives cause to the

¹⁴ The body of light is a concept included in multiple philosophical and spiritual disciplines. For example, as the *tantrikas* (‘rainbow body’) in Buddhism, or the ‘body of glory’ in Christianity (Feuerstein, 2003, Chapter 69).

argument that giving body to this philosophy by practicing Kundalini Yoga is positively impacting one's well-being. However, this is merely a kind of spiritual well-being, belonging to the subjective mental domain of well-being. To redirect our focus on the potential impact of Yoga4Alex on one's well-being, we should focus on the available empirical data. A questionnaire distributed to attendees both before and after the SKY Fest of Yoga4Alex in 2019 provides insight in how the subjective well-being of the attending Yoga4Alex has improved (Yoga4Alex, 2019a; Yoga4Alex, 2019b). By asking questions like 'Did something shift within you?' and 'Has your attitude to yourself changed?' a positive change is to be acknowledged (Yoga4Alex, 2019a; Yoga4Alex 2019b). The answers of these students indicate that for some of them, this festival has changed the way they view themselves and experience reality (Yoga4Alex, 2019b). The extent to which Kundalini Yoga succeeds to positively impact one's well-being is subsequently illustrated by these questionnaires: practicing Kundalini Yoga arguably has a positive impact on the well-being of these youngsters in Alexandra township.

Conclusion

The embeddedness of the practice of Yoga in the Samkhya school of Hindu philosophy has provided the needed uncovering of fundamental concepts, such as *purusa* and *prakriti*, the *gunas*, and the twenty-four *tattvas*. This framework is also believed to provide the ability to retrace the cause of suffering to its source. This presupposed suffering is in its turn a consequence of the permanently continuing of change in the universe, precipitated in the unbalance of the three *gunas*. Yoga builds upon this philosophy, which is thought to be greatly done by Patanjali in his *Yogasutras* and provides a way to get rid of this inescapable suffering. By following the eightfold path towards *samadhi*, one discovers peace of mind and is, after successfully reaching the eight stage, supposedly liberated. A state of peace of mind is however not a goal one can climb towards, though it is often formulated in this manner. Liberation, or enlightenment, ultimately is accepting reality as it really is and being at peace with it. By practicing Yoga, metaphorical doors to this peace, or enlightenment, or liberation, or intasy, are understood to open.

This practice is manifested in Kundalini Yoga as an alleged awaking of a stored energy. By drawing this *kundalini* upwards, it travels through the body and its *chakras*, and reaches the pure consciousness, which leads to the metamorphosis of the human body into a so-called body of light. The practice of Kundalini Yoga including its formulation of this practice is a specific kind of Yoga

but seems to ultimately refer to the overarching philosophical basis. The centrality of the goal to eliminate man's suffering in Hindu philosophy, but essentially in all Indian philosophy as well, gives cause to accept its plausible positive influence on one's well-being. This is also emphasized in the results of Yoga4Alex's mission to empower and support the youth of Alexandra township to break out of the cycle of poverty through the practice of Kundalini Yoga.

Chapter 2: An Interdisciplinary Social Sciences Analysis of Yoga's Impact on the Well-being of Adolescents

Interdisciplinary Social Sciences – Fabienne Plieger

Yoga is bringing fitness in body, calmness in mind, kindness in heart and awareness in life.

- Amit Ray

Introduction

The improvement of the well-being of youth is an important issue, because this generation has a larger population of youth than ever before, according to the Global Youth Wellbeing Index (2017), and their well-being is not optimal. Only eight out of twenty-nine countries, across the entire world, have above average scores. The majority of the remaining twenty-one countries score much lower. These statistics signify the desperate need for the improvement of the well-being of youth. This need is the motivation behind a growing amount of initiatives starting up to improve the well-being of youth through the teachings of Yoga (Giambrone, Cook-Cottone, & Klein, 2018, p. 167). Initiatives such as Yoga4Alex and AfricaYogaProject (AYP). Both projects teach Yoga to adolescents in Africa. Yoga is a practice that integrates postures, breathing, relaxation, and meditation (Butzer, Bury, Telles, & Khalsa, 2016; Iyengar, 1996).

South-Africa scores at the low-end of the Youth Well-being scale and is in twenty-second place. (Global Youth Wellbeing Index, 2017). Nevertheless, both initiatives appear to be effective: Yoga4Alex trains 2000 students every week and has glowing testimonies from its students (“About”, z.d.). AYP has even been the subject of multiple research studies, because of their significant impact on the well-being of youth. One study of AYP concluded from student testimonies that AYP enhanced their well-being multidimensionally (Giambrone, Cook-Cottone, & Klein, 2018, p. 167). Initiatives teaching Yoga for the improvement of youth's well-being are not limited to Africa. Multiple research studies in the USA, China, and India have concluded similar results: Yoga appears to be a useful tool in improving youth's well-being (Chung, 2018).

It proves to be a useful tool because it improves well-being in three domains: subjective, health, and functioning and environment. These domains are based on the Nested Model of Well-

being of Henriques, Kleinman, and Asselin (2014, p. 15)¹⁵Yoga qualifies as impactful to these because it affects positive change in each domain (Giambrone, Cook-Cottone, & Klein, 2018, p. 167).

The previously mentioned studies demonstrate Yoga's impact on the improvement of multiple domains of well-being among adolescents. How Yoga has accomplished these improvements is, however, still unclear. Therefore this thesis examines how Yoga can impact the well-being of adolescents.

Gaining insights into the underlying mechanisms of Yoga's impact will help determine not only how Yoga is able to be impactful to the well-being of adolescents, but also whether the impact is sustainable.

To answer this question, first, each of the three domains of well-being will be analyzed based on Yoga's impact on them. The analysis bases its findings on research studies and social theories related to Yoga's impact on well-being (often in connection to adolescents). This analysis will reveal the underlying mechanisms explaining Yoga's impact on well-being. Finally, there will be an assessment of the relationships between the mechanisms on their level of sustainability.

Theoretical framework:

The Nested Well-being model:

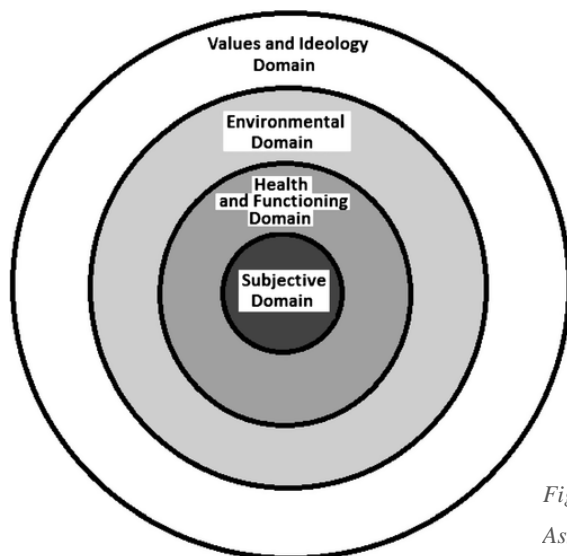


Figure 2: The Nested Model of Well-being (Henriques, Asseling and Kleinman, 2014)

¹⁵. The Nested model (2014) consists of four domains. The fourth domain contains the values and ideology of the individual. Yoga could have an impact on the fourth domain, but because of its subjective character was excluded from the analysis.

Definitions of the Domains:

The subjective domain represents subjective well-being which is defined by not only emotional aspects such as positive emotions and pleasure but includes cognitive aspects as well, such as satisfaction of life, desire for life and activity (Henriques, Kleinman, & Asselin, 2014, p. 15; Yoo, 2019). The domain of health and functioning represents an individual's biological and psychological functioning (Henriques, Kleinman, & Asselin, 2014, p. 15). The environmental domain represents the context in which the individual lives and includes both social and material resources to cope with stressors (Henriques, Kleinman, & Asselin, 2014, p. 15)

Yoga within each domain:

Yoga qualifies as improving the subjective, health, and functioning and environmental domains of well-being. Yoga sparks positive emotions and increases satisfaction of life, which improves subjective well-being. The practice of Yoga is also a physical activity that brings both biological and psychological benefits, therefore improving well-being in the health and functioning domain. These benefits increase cognitive performance and improve relationships which improves the environmental domain as well, according to Giambrone, Cook-Cottone, and Klein (2018, p. 167). The fourth domain of Well-being could also be improved through Yoga's philosophies, but will not be discussed further.

The Domains of Well-being:

Domain 1: Subjective well-being

According to the study of the AYP, the students experienced higher satisfaction of life and more positive emotions (Giambrone, Cook-Cottone, & Klein, 2018, p. 167). Yoga giving rise to more positive emotions is further supported by another research study, which concluded that Yoga has a positive effect on moods (Eyre et al., 2017, p. 558; Streeter et al., 2010, p. 1146). The increased experience of life satisfaction and positive emotions demonstrate a definite increase in subjective well-being through Yoga.

PNS

The increase in positive emotions is partially explainable through Yoga's ability to activate the parasympathetic nervous system (Shripati Wadikar, 2019, pp. 1–3), 2019; Devi & Udupa, 1986).

The parasympathetic nervous system (PNS) is one half of the autonomic nervous system. The other

half is the sympathetic nervous system (SNS). PNS is the opposite of SNS, which handles stressful situations and drives the fight or flight response. PNS is responsible for conserving energy, which can later be used to regulate bodily functions. Therefore it is also called the rest and digest system (Tindle, 2020).

The practice of Yoga can activate the PNS, according to Devi and Udupa (1986) and (Shripati Wadikar, 2019, pp. 1–3) (2019). The PNS is also an activator of the so-called reward system in the brain (Jack, Boyatzis, Khawaja, Passarelli, & Leckie, 2013, p. 379). The reward system is a trigger for positive emotions (Garland et al., 2010). Positive emotions include joy, interest, contentment, and love, which contribute to the improvement of subjective well-being (Fredrickson, 1998, p. 307).

Self-esteem

The increase in life satisfaction can be explained by Yoga's ability to improve self-esteem (Giambrone, Cook-Cottone, & Klein, 2018, p. 167). Self-esteem is, according to Yoo (2019): "a subjective judgment or evaluation of one's own personality, intellectual, and physical characteristics. It can be seen as the ability to accomplish what you are thinking of, the ability to control and influence others, the degree of positive, negative evaluation and attitude about their worth, competence and importance." Life satisfaction and self-esteem have a strong positive correlation (Westaway, Maritz, & Golele, 2003, p. 552). Therefore, when self-esteem increases, so does life satisfaction. This correlation is, however, based on majorly individualistic cultures: more collectivistic cultures, as in South Africa, have reported having a lower correlation (Westaway & Maluka, 2005, p. 570). The improvement of self-esteem can also be attributed to positive emotions.

Positive Emotions

Positive emotions appear not only to be an indicator of subjective well-being. They have an impact on self-esteem and life satisfaction, as well. Positive emotions affect levels of self-esteem by creating a countervailing force on negative feelings, such as inefficacy. Within the definition of self-esteem by Yoo (2019), this force exerted by positive emotions acts as a protective influence over self-esteem.

Furthermore, positive emotions have shown to increase life satisfaction by building resources of resilience (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009, p. 364). These resources help deal with a wide variety of challenges in life (Cohn, Fredrickson, Brown, Mikels,

& Conway, 2009, p. 364). These described benefits of positive emotions (and the ones to come) are most effective when experienced often. Every time a negative emotion is experienced, three positive ones should follow. This ratio is necessary in order to offset the negative impact of the negative emotions and to sufficiently spark the dynamics of the benefits of positive emotions (Garland et al., 2010).

The increased satisfaction of life and positive emotions felt can be explained by the activation of the PNS through Yoga. The PNS causes positive emotions to be triggered, which in turn boosts self-esteem and impacts life satisfaction.

Domain 2: The health and functioning of the individual

The second domain of well-being is focussed on biological and psychological functioning.

Yoga has many documented health benefits, such as: lowering blood pressure, lowering pulse rate, decreasing hypertension in the heart, a better quality of sleep, decreased levels of pain (Shripati Wadikar, 2019, pp. 1–3), 2019; Ross & Thomas, 2010, p. 10).

Research is even being conducted on Yoga's ability to affect the immune system positively. The results are not conclusive yet, but have been positive (Falkenberg, Eising, & Peters, 2018, p. 476; Morgan, Irwin, Chung, & Wang, 2014; Ross & Thomas, 2010, p. 10).

The health benefits of Yoga are not solely biological. The psychological benefits of Yoga include aiding the following mental problems and disorders: OCD (Shannahoff-Khalsa, 2004b, p. 100), PTSD (Jindani, Turner, & Khalsa, 2015, p. 5), anxiety (Shannahoff-Khalsa, 2004b, p. 100; Sharma & Haider, 2012, p. 21; Graczyk, Connolly, & Corapci, 2006, p. 137) and depression (Sarkar, Kumar, Subramaniam, Bhavanani, & Balasundaram, 2019b, p. 592; Eyre et al., 2017, p. 558; García-Sesnich, Flores, Ríos, & Aravena, 2017, p. 73; Javnbakht, Hejazi Kenari, & Ghasemi, 2009, p. 102; Devi & Udupa, 1986). Brain health is overall improved through Yoga (Gothe, Khan, Hayes, Erlenbach, & Damoiseaux, 2019, p. 114). These health benefits can be (partially) explained by Yoga's activation of the PNS and positive emotions.

PNS

The activation of the PNS is, according to professor Richard Boyatzis (2015), the state in which the body renews itself. He describes it as a state in which humans are cognitively and emotionally at their best. The PNS causes relaxation and renewal: it lowers blood pressure and pulse rate, promotes neurogenesis, and helps the immune system function at its optimum level (Boyatzis,

2015).

Yoga’s ability to activate the PNS appears to downregulate the SNS (Shripati Wadikar, 2019, pp. 1–3), 2019). The influence of the SNS is made visual in Figure 3. In cases of chronic stress, the SNS activates too often. Boyatzis (2015) states that a build-up of chronic stress leads to a compromised immune system, which causes higher chances of viral and bacterial infections. Heart attacks, strokes, sleep disorders, gastrointestinal difficulties, and sexual dysfunctions are also common. By counteracting moments of stress with a PNS activating activity such as Yoga, at a ratio of 3:1, chronic stress can be avoided or combatted (Boyatzis, 2015).

Stress, chronic, or non-chronic, is mitigated by practicing Yoga (Sharma & Haider, 2012, p. 21; Granath, Ingvarsson, von Thiele, & Lundberg, 2006, p. 9). The renewing qualities of PNS help restore the body from harmful, physical consequences of stress (Boyatzis, 2015). The downregulation of the SNS through Yoga's activation of the PNS also appears likely to be responsible for the cardiovascular benefits of Yoga, which is supported by (Shripati Wadikar, 2019, pp. 1–3)'s findings (2019).

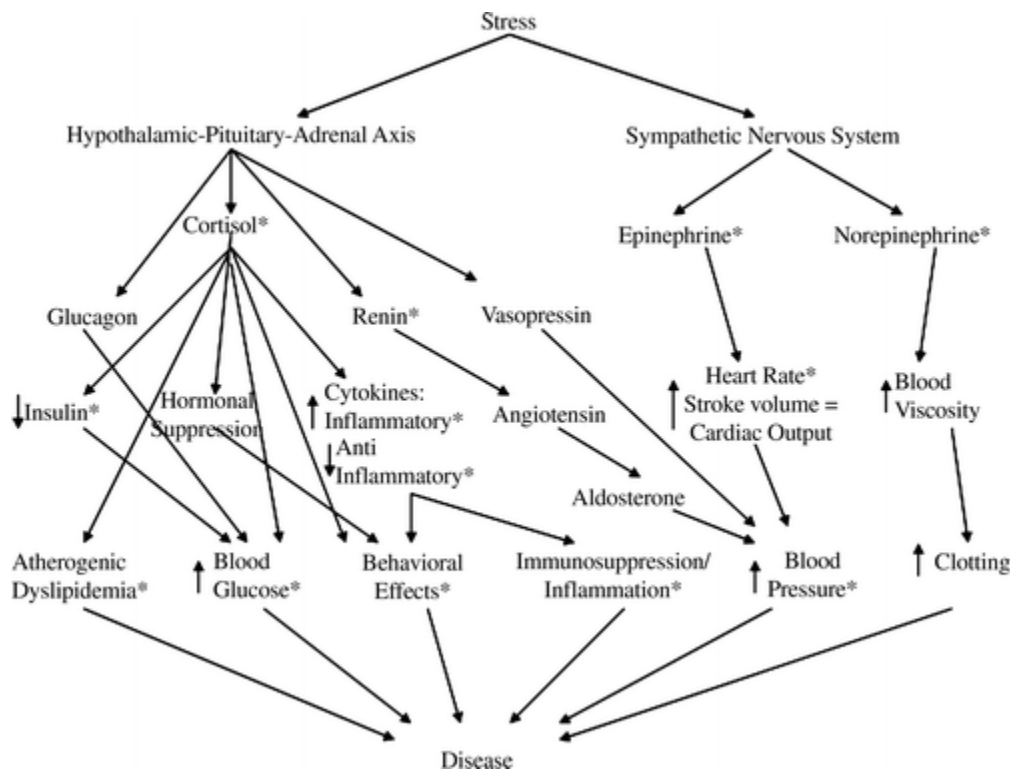


Figure 3: The Influence of Stress Model by Ross and Thomas (2010). The asterisks show the items on which Yoga has a proven significant beneficial effect.

Positive emotions

Positive emotions are beneficial to cardiovascular health because they speed the recovery from aftereffects of negative emotional arousal (L. Fredrickson & Levenson, 1998, p. 192). Negative emotions can create harmful cardiovascular effects and also create downward emotional spirals resulting in: defensive behavior, focusing on threats, and feelings of inefficacy (Garland et al., 2010).

The effects of positive emotions have an inverse structure to that of negative emotions. Positive emotions can create a counterbalancing force, relieving the dysphoric, fearful, and anhedonic states caused by emotion-related disorders (Garland et al., 2010). Furthermore, they broaden the scope of attention and cognitive function (Fredrickson, 1998, p. 307). Combined, the PNS and positive emotions create a state in which biological and psychological functioning seems to be at its optimum: creating an ideal state of health and functioning.

Domain 3: The environmental context in which the individual lives (both social and material)

The environmental context focuses on the availability of resources for an individual to meet their needs socially or to cope with stressors. This domain includes both material and social resources. However, only social resources will be used for analysis. The study of the AYP by Giambrone, Cook-Cottone, & Klein (2018, p. 167) reported that the environmental domain becomes improved by increased cognitive performance and relationships, caused by the improved well-being in Domain 2. The improvements in Domain 3, however, appear not to be caused solely by better health and psychological functioning. Yoga contributes to the gaining of multiple types of coping resources.

Positive emotions

The positive emotions experienced through the practice of Yoga, as mentioned in Domain 1, can create resources to cope with stressors. A stressor is defined as "an event or experience that invokes a range of unpleasant emotions like uneasiness, nervousness, anxiety, and fear. More scientifically speaking, stress is a state of disharmony or threatened homeostasis provoked by psychological, environmental, and/or physiological factors called 'stressors'" (Shripati Wadikar, 2019, pp. 1–3), 2019). Positive emotions are ephemeral; however, their effects on well-being are not. Experiencing positive emotions broadens the thought and action repertoire: it increases mental flexibility, augments meaning-based coping, and motivates engagement in novel activities and social

relationships (Garland et al., 2010). Positive emotions also build personal resources that are durable because its accrual triggers even more positive emotions. This mechanism leads to a self-sustaining upward spiral of well-being (Garland et al., 2010).

Social capital

Yoga initiatives play an especially important role in making social resources available. By creating positive social connections with adolescents, they instill social capital upon them. Social capital is significant because of its ability to help adolescents cope with stressors. Yoo’s multidimensional model of stress coping (2019) will be used (Figure 4) to analyze the effect of increased social capital on coping with stress.

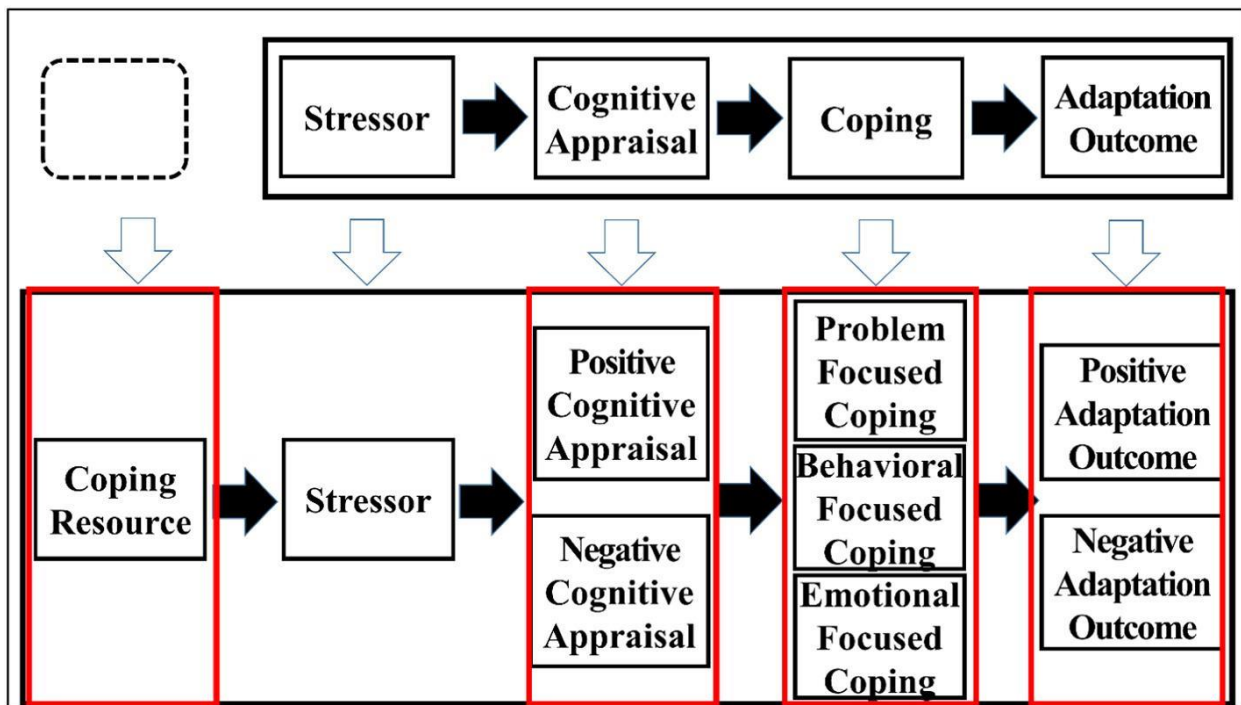


Figure 4: The Multidimensional Model of Stress coping among Adolescents (Yoo, 2019)

Yoo’s model (2019) is based on the stress appraisal model of Lazarus and Folman (1984). The 2019 model acknowledges coping resources, positive or negative cognitive appraisal of a stressor, and three types of coping mechanisms. Yoo stresses the importance of adolescents learning to cope with stress healthily, stating that repeated use of ineffective coping strategies during adolescence could lead to psychopathological symptoms as adolescents grow into adulthood (Yoo, 2019). Three points within the process of handling stressors are identified that can be

improved upon to create the ideal stress-coping process for adolescents. Gaining more coping resources, positive cognitive appraisal, and using problem based coping.

The most potent coping resource, according to Yoo (2019), is social capital, which is supported by Cramm (2010). Social capital is defined as inward-looking bonds, relationships, networks centered on trust and interrelations, which link within groups (Yoo, 2019).

Yoga initiatives stimulate the forming of social capital because the practice of Yoga activates the PNS, which has been proven to make an individual more open towards others (Boyatzis, 2015, 00:00–16:25). The initiatives also create a space where Yoga is practiced with others, therefore, increasing the chances of improving relationships within the PNS state. Lastly, the initiatives themselves invest in adolescents as a social initiative: increasing social capital even more.

Yoga makes an individual more open towards others through the activation of the PSN, but when Yoga is practiced with others, this openness can directly affect relationships with others. Yoga indirectly improves social relationships, resulting in the gaining of social capital as a coping resource. Yoga also directly contributes to the gaining of resources of resilience, which also helps in coping with stressors. Thus, Yoga, both directly and indirectly, can improve environmental well-being.

Analysis of Inter-Domain relationships:

The Self-esteem Feedback-Loop:

Yoo's model (2019) includes cognitive appraisal, which can be either negative or positive. The deciding variable for positive or negative is self-esteem. Self-esteem is a fundamental factor in life satisfaction and, therefore, subjective well-being (Westaway, Maritz, & Golele, 2003, p. 552). Gaining more favorable social experiences can be conducive to improving self-esteem (Cheung, Cheung, & Hue, 2014, p. 76). Yoga activating the PNS creates a chain reaction that results could improve self-esteem significantly. The positive emotions triggered by the activation of the PNS motivate engagement in social relationships (Garland et al., 2010). The PNS also creates a more open attitude towards other individuals and their emotions (Boyatzis, 2015). These mechanisms do not create social skills where there were none. However, they could improve social relationships, which, in turn, improve self-esteem. Improved self-esteem has not only consequences on cognitive appraisal, but influences the coping mechanism chosen as well (Lazarus & Folkman, 1984; Yoo,

2019). Higher self-esteem leads more often to the problem based coping mechanism, which is regarded as the most effective (Lazarus & Folkman, 1984; Yoo, 2019). This mechanism creates a positive feedback loop in which an individual becomes more confident in their abilities which causes them to choose the superior coping mechanism, resulting in even more success, which is likely to increase their self-esteem even more and with it their satisfaction with life.

The Stress Feedback-Loop

Another positive feedback loop is created because of Yoga's effect on stress. Yoga does not lessen stressors; however, it improves upon managing them. Yoga downregulates the SNS by activating the PNS, which causes many health and functioning benefits. Also, it restores the body from the effects of stress. The PNS triggers positive emotions, which aid in cardiovascular recovery after negative emotional arousal. Yoga improves coping with stress by increasing self-esteem, as seen in the self-esteem feedback loop, in both cognitive appraisal and coping mechanisms. Social capital was discussed, which is a coping resource. Social capital is further aided by the resources of resilience built by positive emotions. Yoga creates, by activating the PNS, the best possible cognitive state to deal with stress. These actions combined are hypothesized to downregulate the SNS further. When the SNS is downregulated in favor of the PNS often enough, chronic stress can be avoided or aided. These improved mechanisms for managing stress can help adolescents avoid chronic stress and the diseases caused by the SNS, as illustrated in Figure 3.

Discussion & Conclusion:

In this paper an attempt has been made to map the underlying mechanisms of Yoga's impact. To explain how Yoga can improve the well-being of adolescents. The well-being of adolescents is still not at a high or even moderate level everywhere in the world. The youth population being higher than ever, this problem needs to be resolved on a grand scale. Yoga can be the solution because it has a significant impact on three domains of well-being.

The activation of the PNS can explain the improvements in the domain of subjective well-being through Yoga. The PNS causes positive emotions to be triggered, which in turn boosts self-esteem and impacts life satisfaction. Furthermore, adolescents being taught Yoga can increase their well-being in the domain of health and functioning because many health benefits accompany Yoga through the activation of the PNS and positive emotions. These health improvements can either aid existing biological and psychological issues in functioning or be a preventative influence. Finally,

Yoga, both directly, through positive emotions, and indirectly, through improved social relations, aids the gaining of coping resources: which improves environmental well-being.

The underlying mechanisms of Yoga's impact in the domains appear to have many relationships, many of which have a stimulating effect on each other. Yoga indirectly impacts self-esteem, which has meaningful consequences for positive cognitive appraisal and using healthy coping mechanisms. Yoga further increases self-esteem by the openness towards others caused by the activation of the PNS and positive emotions. The openness is hypothesized to have a beneficial influence on social relationships and, thereby, resources to cope with stress.

Yoga indirectly also sets in motion multiple mechanisms, which increase the chances of using more healthy stress coping mechanisms, increase cognitive appraisal, coping resources, and aid the restoration of the body after stress. Furthermore, it can establish a more healthy balance between the PNS and the SNS. These mechanisms could be pivotal in changing unhealthy stress coping mechanisms to healthy one.

Yoga's positive impact on stress coping is especially significant for adolescents because the use of unhealthy coping is likely to follow them into adulthood with psychopathological symptoms as a consequence. These symptoms would, of course, negatively impact their well-being; therefore, Yoga's influence on stress coping is incredibly valuable.

The discovery of the two feedback-loops is of great importance, for this indicates that the practice of Yoga affects change using mechanisms that will increase over time. Thus practicing Yoga creates a powerful self-sustaining impact on three domains of well-being. Therefore, Yoga must become an integrated part of education because the maximum positive impact occurs when Yoga is practiced for a longer time, consistently and often; which can be established best through institutions like schools.

This research paper is however mostly based on literature and can therefore not make definitive statements on the underlying mechanisms of Yoga, only hypothetical claims.

Research should therefore be conducted to definitively prove these mechanisms to be the causes of Yoga's impact. Specifically, the self-esteem feedback loop, because self-esteem appears to have the most significant impact on multiple areas.

Chapter 3: Yoga4Alex as a Sports for Development Initiative

International Development Geography – Myrthe Jeuken

Sport has the power to change the world. It has the power to inspire. It has the power to unite people in a way that little else does. It speaks to youth in a language they understand. Sport can create hope where once there was only despair.

- Nelson Mandela

Yoga4Alex can be compared to a wide range of Sport for Development initiatives. Due to shifting international development paradigms, sport has gained global status as a development strategy (Lemke, 2016). While the majority of Sport for Development projects consists of a competitive sports, like soccer (Lawson, 2005; Schulenkorf, Sherry & Rowe; 2016), some unconventional sports like Yoga might have a bigger contribution to one's well-being (Lawson, 2005). In this chapter the impact of Yoga4Alex as a Sport for Development initiative will be established, by answering the question: What is the impact of Yoga4Alex as a Sport for Development initiative on Alexandra's youth? By viewing Yoga as a development intervention, this chapter is able to look beyond Yoga as a tool, and place it within the context of Alexandra, Alexandra's youth, and the execution of Yoga4Alex.

Sport for Development: The Paradigm

Shifting the international development paradigm towards well-being

International development has always been concerned with improving human well-being (Copestake, 2008). However, the development ideology has evolved since the origin in the late 1940s. While development consisted of a pursuit of economic growth till the 1970s, numerous dimensions of development have emerged since (Potter *et al.*, 2018). The current development paradigm is beyond the measures of economic growth, poverty and inequality and has moved towards multidimensional concepts, like human well-being (Rossouw & Naudé, 2007).

While South Africa has one of the highest Gini co-efficient, measurements of wealth lack the complexity of people's quality of life (Higgs, 2006). In 2011, the General Assembly urged the United Nations Member States to “undertake steps that give more importance to happiness and

well-being in determining how to achieve and measure social and economic development” (UN News, 2011). In 2015, all United Nations (UN) Member States agreed to the 17 Sustainable Development Goals (SDGs). While the 2000’s Millennium Development Goals included 8 goals - with an main focus on eradicating poverty in the global south - the SDGs are much broader and include all countries (Liverman, 2018). The third SDG goal focuses on good health and wellbeing, because “ensuring healthy lives and promoting the well-being at all ages is essential to sustainable development” (UN, n.d.). According to Lindsey and Darby, SDG 3 represents a paradigm shift from the MDGs’ narrowly focused health goal, towards a broadening agenda with a universal and holistic concept of both health and well-being (2019).

However, well-being is a complex concept, with various definitions and measurements. The World Happiness Report (Helliwell *et al.*, 2020), the UNDP (Anand, 2016), OECD (OECD, 2020), and The Global Youth Wellbeing Index (Sharma *et al.*, 2017) have all grasped an understand of both the definition people’s wellbeing and its measurements. The World Happiness Report defines well-being as the quality of life (Helliwell *et al.*, 2020). However, the UNDP Human Development Report has a more narrow definition of well-being: “wellbeing is best understood as a multifaceted phenomenon that can be assessed by measuring a wide array of subjective and objective constructs” (Anand, 2016). Similarly, the OECD likewise includes both subjective and objective constructs, as the OECD Well-being Framework defines well-being as the “living conditions at the individual, household and community levels, and describe[s] how people experience their lives ‘here and now’” (OECD, 2020). Lastly, the definition of well-being according to The Global Youth Wellbeing Index is inspired by the World Happiness Index, UN’s Human Development Index, and OECD’s Better Life Index (Goldin, Patel & Perry, 2014):

Wellbeing is a multidimensional concept that includes a person’s physical and mental health, educational status, economic position, physical safety, access to freedoms, and ability to participate in civic life. It is, in a sense, the abundance or scarcity of opportunities available to an individual (Sharma *et al.*, 2017).

The Global Youth Wellbeing Index also includes both objective and subjective well-being measurements (Goldin, Patel & Perry, 2014). For this chapter well-being will be defined according to the broad definition of the Global Youth Wellbeing Index. In Table 2 the measurements of well-

being according to the World Happiness Report, OECD Better Life Index, and the Global Youth Wellbeing Index are portrayed.

Report/index	Measurements
World Happiness Report	GDP per capita, social support, healthy life expectancy, freedom, generosity, and absence of corruption.
OECD Better Life Index	Income and wealth, housing, work and job quality, health, knowledge and skills, environmental quality, subjective well-being, safety, work-life balance, social connections, civic engagement.
The Global Youth Wellbeing Index	Gender equality, economic opportunity, education, health, safety & security, citizen participation, ICT.

Table 2: Helliwell et al., 2020; OECD, 2020; Sharma et al., 2017

To create a more organised system for approaching the measurement and establish a more holistic understanding of the implications of well-being, the measurements will be categorised into three dimensions: relationship with self, relationships with others, and relationship with the society. In Table 3 the relevant measurements of the three organisations are organised according to this structure. The selections of the measurements for this research is chosen according to the relevance of each measurement towards both youth and Sports for Development interventions. And some measurements showed similarities, therefore they were combined. Lastly, the measurements are not strictly limited to one dimension, as some measurements occur in multiple relationships. In short, improving the measurements, means improving the relationships, which results in an improved well-being.

Dimensions of Well-being	Measurements
Relationship with self	Education, subjective well-being, health, and freedom.
Relationships with others	Social capital, safety and security.
Relationship with society	Safety and security, economic capital, citizen participation, and freedom.

Table 3: Helliwell et al., 2020; OECD, 2020; Sharma et al., 2017

Sport for Development

When in 2003 the General Assembly of the UN enabled “Sport as a means to promote education, health, development and peace” (Burnett, 2009), Sports for Development (SFD) gained international legitimacy and global status as an international development strategy. After a decade, sport had proven to be a success as a cost-effective and flexible sustainable development tool

(Lemke, 2016). With the introduction of the SDGs as the new development discourse, sport has remained high on the development agenda. The United Nations Office on Sport for Development and Peace (UNOSDP) stated sport is able to contribute to all 17 SDGs (UNOSDP, n.d.), and especially, sport is also able to promote to well-being (UNOSDP, n.d.; Lawson, 2005; Lubans, Plotnikoff & Lubans, 2012).

According to Lawson (2005), the essence of sport, exercise, and physical education projects is grounded in "liberating and empowering people, enabling them to eliminate terror, find joy, maximize their freedom, and improve their health and wellbeing". SFD interventions are in generally focussed on groups of individuals who are perceived as marginalised. This includes for example senior citizens, children, and people with socio-economic vulnerabilities (Burnett, 2009).

Regarding the impact of SFD projects and policies, Burnett (2009) illustrates "that social change is inherent in the in-field application of sports development, where sport is instrumental to the change in whatever form of focus it might have. Change represents a process that could have positive or negative consequences. [However], development is reflected in the notion of progress for the recipients." This chapter will therefore focus exclusively on the positive impact on well-being of SFD initiatives. In this paragraph the impact of SFD projects will be explained through the impact on the three dimensions of well-being: the relationship with self, the relationships with others, and the relationship with the society.

The impact of Sport for Development on one's Relationship with Self

First an understanding of the impact of SFD interventions will be established by looking into the impact on the relationship of recipients with themselves. This relationship consists of the following four measurements: education, subjective-wellbeing, health, and freedom.

According to Lawson (2005), sport programs and practices are "instrumental in improving youth development and enabling educational success," especially regarding vulnerable youth. Sport is able to enhance knowledge, skills, attitudes, competence, and especially one's capacity for work-related activities. These aspects of educational benefits are able to contribute to human capital development, and in long-term, sustainable success (Lawson, 2005).

The improvement of educational attainment, and graduating secondary education is associated with higher life satisfaction (OECD, 2020). Life satisfaction is part of one's subjective well-being. Subjective well-being consist of "mental states, and how people experience their lives" (OECD, 2020). According to the OECD subjective well-being includes: life evaluations (like life

satisfaction); affects (like emotions); and eudaimonia (meaning and purpose). Research shows mostly the impact of SFD interventions to eudaimonia, by improving one's identity development, improving efficacy, self-worth (Lawson, 2005), self-esteem, and behavioral skills, such as self-monitoring, self-assessment and goal setting (Lubans, Plotnikoff & Lubans, 2012). The improvement of self-worth is especially prominent among at-risk youth (Lawson, 2005). On the other hand, an improved self-esteem is accomplished because sport enables to master body functions and develop motor skills, this is able to trigger a sense of achievement which leads to the improvement of one's self-esteem (Lubans, Plotnikoff & Lubans, 2012).

Beyond improving subjective-wellbeing, SFD projects are able to contribute to multiple aspects of health as participation may: benefit the physiological health of youth (Lubans, Plotnikoff & Lubans, 2012); reduce mental illness in both short and long-term (Lubans, Plotnikoff & Lubans, 2012); and reduce substance abuse, due to the prosocial aspect of SFD interventions (Ward, Van der Merwe & Dawes, 2013). The improvement of health is able to contribute to sustainable development (Lawson, 2005). Lastly, SFD interventions enable participants to maximize their freedom, including, "freedom to choose, starting with what to do, play, and create" (Lawson, 2005).

The impact of Sport for Development on one's Relationships with Others

Secondly, the impact of SFD on the relationship of recipients with themselves will be explored. The relationships with others consists of the following two measurements: social capital, and safety and security.

Social capital consist of both the quantity and quality of social connections, like the amount of time socialising, having someone to go to in time of need, and the amount of support people feel received from others (OECD, 2020; Helliwell *et al.*, 2020). Participating in SFD programs establishes meaningful engagements, and loving, caring and nurturing relationships (Lawson, 2005), like friendships, and viewing others as social agents and role models (Burnett, 2009). Through sport interventions social support networks are created, which increases one's well-being (Lubans, Plotnikoff & Lubans, 2012). Social networks produces social trust. The members can include the participants, their families, other residents, and the facilitator of the program (Lawson, 2005).

In addition, research has shown the impact of SFD on the improvement of safety and security, for instance by the reduction of crime (Ward, Van der Merwe & Dawes, 2013; Burnett, 2009). A study in Cape Town showed that the introduction of after-school activities, like sport

programs, could possibly reduce the attractiveness of engaging in gang activities (Ward, Van der Merwe & Dawes, 2013). Besides, participating in SFD interventions can reduce criminal activities in general, due to the prosocial aspect of the programs (Ward, Van der Merwe & Dawes, 2013).

The impact of Sport for Development on one's Relationships with Society

Lastly SFD impacts one's relationship towards their society. SFD practices, programs and policies "have the potential to strengthen both empowerment and community development initiatives, especially those in high poverty localities" (Lawson, 2005). The impact on the relationship with society consists of four measurements: safety and security, economic capital, citizen participation, and freedom.

Besides the one on one relationships, SFD also contributes to the improvement of one's relationship with the larger community. In the context of conflict and war regions, SFD is often used to create peaceful coexistence (Burnett, 2009) as the programs are often designed to facilitate "appropriate, continuous, and face-to-face interactions, enabling strangers and outsiders to become friends and insiders" (Lawson, 2005). Through these Sport for Development and Peace programs, collective identities can be established (Lawson, 2005). Collective identities enable "people to enjoy social solidarity, join together for collective action, and foster peaceful, harmonious relations" (Lawson, 2005). According to Lawson (2005), especially place-based, local identities are able to "bridge inter-group differences and conflicts" and establish "peaceful harmonious relations among diverse people" (Lawson, 2005). Therefore, peaceful coexistence is able to contribute to the establishment of safety and security, because, when social connections increase, inter-group conflicts decrease.

Secondly, one's relationship with the society improves through the impact on economical capital. According to Lawson, SFD projects are able to improve well-being by alleviating the harms caused by poverty, and even "reducing and, ideally, eliminating poverty" (2005). This is due to SFD's contribution to human capital. As mentioned in the dimension of relationship with self, SFD is able to enhance one's "knowledge, skills, attitudes, [and] competence" (Lawson, 2005). These contributions to human capital improve one's workforce characteristics and work-related activities (Lawson, 2005), which is able to increase job opportunities.

Another part of human capital is the capacity of citizenship participation (Lawson, 2005). According to Burnett (2009), SFD programs are able to develop citizenship. Due to the established social networks, and collective identities, SFD contributes to the relation with civil society. Social

inclusion contributes significantly to one's capacity to participate to productive citizenship (Lawson, 2005).

Lastly, the safety benefits mentioned above also foster one's relationship towards their freedom within a society. According to Lawson, besides the freedom from terror, SFD can also enable maximizing one's freedom from oppression and the ills of poverty (2005).

Yoga4Alex: A Sport for Development Case Study

In 2010, South Africa attracted a lot of attention for SFD projects, by hosting the FIFA World Cup, as the first Africa country to do so. Due to this global event, South Africa was "targeted as a gateway for international agencies to explore and export their sport initiatives into the rest of the African continent" (Burnett, 2009). South Africa is home to many SFD initiatives, like the governmental Sport and Recreation South Africa (SRSA, n.d.), Youth Development Through Football (Youth Development Through Football, n.d), UNICEF (UNICEF, 2011), and Waves for Change (Snelling, 2015). The current sport selection of Sport for Development initiatives is limited, as governmental leaders, and private enterprises focus exclusively on elite sport (Lawson, 2005). SFD is particularly associated with football (soccer) (Schulenkorf, Sherry & Rowe; 2016). This is problematic, as "everyone wants to be healthy and enjoy well-being, but not everyone wants to compete, struggle, sacrifice, enjoy the sweet tastes of victory, and endure the agony of defeat" (Lawson, 2005). Even though conventional sport is highly popular among SFD initiatives, forms of play make the biggest contribution, including dance, biking, and yoga (Lawson, 2005). Though these projects are limited, there are some examples of SFD programs offering non-competitive sports like Yoga. In this paragraph an understanding of the case initiative Yoga4Alex will be established within the framework of a Sport for development program.

The Context of Alexandra's youth

Yoga4Alex is located in Alexandra township, Johannesburg. Alexandra was established in 1912 and declared as a freehold township for the black and coloured residents. Alexandra has a history of poverty and over-crowding, leading to the development of informal settlements (Mbokazi, 2016). According to Burnett (2010), poverty manifests in all levels of human lives, including: high levels of violence (Burnett, 2010; Ward, Van der Merwe & Dawes, 2013); gang formation (Burnett, 2010); high school drop-out rates (Grossen, Grobler & Lacante, 2017; Burnett, 2010); and high unemployment levels (Scheba & Turok, 2019).

According to the Global Youth Wellbeing Index, South Africa's youth ranks at the lower end (Sharma *et al.*, 2017), besides the national well-being is still falling (Helliwell *et al.*, 2020). This is mainly due to unsatisfactory economic opportunities, health, and safety and security (Sharma *et al.*, 2017). Nonetheless, while the Global Youth Wellbeing Index ranks education as satisfied, this is not the case for education within townships (Grossen, Grobler & Lacante, 2017). According to Lubans, Plotnikoff and Lubans, Alexandra's youth could be defined as at-risk, "at-risk' or 'disaffected' youth are children and adolescents who live in a negative environment" (2012). If Yoga4Alex is able to contribute to the improvement of the well-being of Alexandra's youth, it might start a chain of positive impacts towards employment and hopefully prosperity.

The Yoga4Alex initiative

Yoga4Alex aims to achieve two key objectives: "contribute to the development and education of young people through providing accredited skills, which improve their opportunities for success" (Yoga4Alex, 2018); and "create an environment for learning and development of young people to cope with the demands and challenges created by their circumstances by practicing Yoga, which relieves fear, stress, depression and anxiety" (Yoga4Alex, 2018). With these main objectives, Yoga4Alex aims to create opportunities for unemployed young people, and eventually aid young people to break out of the cycle of poverty (Yoga4Alex, 2018).

To achieve these main objectives, the NGO offers multiple programs to Alexandra primary and secondary students. While the programs range from reading activities, to playing board games, their first and main tool remains Yoga. In 2018, Yoga4Alex offered weekly Kundalini Yoga lessons during school time to 2,229 students from three local schools. These lessons were offered to Grade 8, 11, and 12. Besides the mandatory lessons during school time, Yoga4Alex also offers voluntarily after school lessons which were regularly participated by around 50 students (Yoga4Alex, 2018).

The people behind Yoga4Alex consist partly of graduated students. One of the additional programmes of Yoga4Ales is the Gap Year Programme. This program includes graduated students who valued the Yoga lessons during their school time, and choose to contribute to Yoga4Alex during a gap year. In 2018, these so called Grade 8 Buddies have been running various afterschool activities for 160 Grade 8 students. This is one of the examples of how graduated students remained active within Yoga4Alex (Yoga4Alex, 2018).

Besides the regular classes, and afterschool activities, Yoga4Alex has also organised two larger Yoga events in 2018: Yoga4Mandela, and Spring Kundalini Yoga Festival. Yoga4Mandela

received 301 participants, and Spring Kundalini Yoga Festival was visited by the 50 regular participant and additional youth, including five Yoga instructors, and five Yoga4Alex alumni (Yoga4Alex, 2018).

The impact of Yoga4Alex on the well-being of Alexandra's youth

In 2019, Yoga4Alex organised a large Yoga event, called SKY Fest. After this event, a survey¹⁶ was distributed among the participants, of which 82 participants filled in the questionnaire¹⁷. Several answers are able to establish an understanding of the impact of Yoga4Alex on well-being of the participants regarding the two dimensions of their relationship with self, and relationship with others.

One of the first questions the participants were asked is: did something shift within you? While this question is broadly interpretable, it can be argued that the majority of the participants interpreted the question as whether they experienced a positive impact during one of the Yoga practices. Therefore, this question gives insight towards understanding the impact of practicing Yoga. According to the answers, the direct practice of Yoga especially impacted their relationships with self. 31 participants experienced an improvement of their subjective-wellbeing, especially affects (shift to positive emotions), and eudaimonia (increased self-esteem, and improved purpose and mind-set). In addition, 13 participants experienced an improvement of their health, especially their mental health (feeling peaceful, absence of stress, and relaxation). The following question has shown a significant increase in self-esteem: has your attitude to your self changes? 65 of the 82 participants answered 'yes'. While the question does not exclude negative change, additional comments show it was widely interpreted as positive change. While also attitude towards school work has changed, the question and answers are too diverse to analyse (Yoga4Alex, 2019).

Regarding the improvement of the relationships, the survey only covered the social capital aspect. 80 of the participants expressed they made new friends, and 64 of the participants announced their relationships towards their family to be improved. While the question regarding family was formulated as, "has your family's attitude changed since Sky Fest?", the majority of the participants answered that their own attitude towards their family has positively changed,

¹⁶ The total data of this survey can be found in Appendix E: Post-SKY Fest Survey.

¹⁷ The questionnaire was made by Yoga4Alex, and the data was gathered by Yoga4Alex. Therefore these questions are not made with the purpose to establish an understanding of the impact of Yoga on the well-being of the participants. However, some questions are able to be analysed for this purpose.

instead of their family's attitude towards them (Yoga4Alex, 2019). In conclusion, SKY fest in particular has positively contributed the well-being of youth regarding the two dimensions: relationship with self, and relationships with others.

Discussion

Considering Yoga4Alex as a SFD intervention, the impact of Yoga4Alex can reach beyond the results from the questionnaire. However, before Yoga4Alex can adopt the acknowledged impact of SFD interventions, it is important to establish both the similarities and differences between Yoga4Alex and the general SFD initiatives. This new understanding of Yoga4Alex as a SFD initiative, will result in the answer to the question, What is the impact of Yoga4Alex as a Sport for Development initiative on Alexandra's youth?

First, Yoga4Alex has many similarities with SFD interventions. Yoga4Alex uses sport as a tool for development. The high unemployment rate is a result of educational factors, like low literacy levels and high school drop-out rates (Burnett, 2010). Yoga4Alex acknowledges the importance of improving the well-being of youth during their secondary education, as stated in their 2018 Annual Report: "Yoga4Alex is on a mission to create opportunities for unemployed young people to gain a deep understanding of their own self-worth and to recognise their own potential through the practice of yoga" (Yoga4Alex, 2018).

However, there are some differences between SFD and Yoga4Alex. Many projects of SFD are focused on war and conflict zones. Because this context does not apply to Alexandra, some implications of SFD programs are not relevant, like the importance of establishing peaceful coexistence through creating a collective identity. In addition, as Yoga is an unconventional sport for a SFD program, there is little research specifically regarding Yoga. This results in possible unknown limitations of Yoga as a SFD tool. On the other hand Yoga might also offer new impacts beyond the current reach of SFD. For instance - beyond physical activity - Yoga also offers practices of mindfulness (Ward, Van der Merwe & Dawes, 2013). This and many more differences might open new gates towards new benefits.

Considering both the similarities and differences between Yoga4Alex and conventional SFD initiatives, Yoga4Alex is able to positively impact youth's relationships with self, others, and society. First, through the use of a sport intervention, Yoga4Alex is able to help youth improve their relationship with themselves, this includes: enhancing knowledge, skills, attitudes,

competence, and one's capacity for work-related activities to enable educational success; improving subjective well-being, like life satisfaction, emotions, meaning and purpose; contributing to better health, through improving physiological and mental health, and reducing substance abuse; and maximizing their freedom. Secondly, Yoga4Alex is able to contribute to the relationships of youth towards others, referring to: improving social capital by establishing friendships, social support networks, enhancing relationships with family, and introducing role models, like the Grade 8 Buddies; and improving safety and security, as especially participants of the after-school activities are less likely to engage in gang activities, and the overall reduction of criminal activities. Lastly, Yoga4Alex is able to contribute to youth's relationship with society. By improving educational success, and through the intervention of Yoga, Yoga4Alex is able to improve workforce characteristics, and reduce poverty in the long-term. In addition, Yoga4Alex is able to establish social inclusion, and generate productive citizenship.

However, while SFD initiatives offer idealistic promises, it is important to look beyond the program. Yoga4Alex focuses their Yoga intervention mainly on secondary education students. While some graduated students remain active within the project, the majority of the students will no longer benefit from the initiative after graduation. While some graduated students might continue to use Yoga as a self development tool, some might also discard these practices. It is therefore difficult to predict Yoga4Alex's long-term impact through these young adolescents lives.

While Yoga4Alex is currently able to positively impact Alexandra's youth, present circumstances have changed significantly. Due to the global pandemic of COVID-19, South Africa is in a current lockdown. Social distancing and closed schools are the current reality of Alexandra's youth today. These new circumstances heavily impact SFD initiatives around the globe, as these initiatives are based on social contexts, and physical contact. Digital technology might be able to assist these initiatives, and keep some of the projects active. Creativity, and innovation is therefore needed in these times to actively generate positive impact.

Sport for Development is a wide applicable tool to enhance a broad dimensions of well-being measurements. Especially at-risk youth have been an important topic within this field. While Yoga is an unconventional practice of SFD, it is therefore important to establish a wider understanding of the possible impacts of Yoga on the well-being of youth, which might lead to new opportunities worldwide.

Part II: Holistic Approach

An outlier does not lack knowledge but has interdisciplinary knowledge to see things differently.

— Pearl Zhu

Chapter 4: Common Ground

Creating common ground is like building a bridge in order to span a chasm.

- Repko & Szostak

The purpose of this chapter is to create common ground between the disciplinary insights from Part I. Common ground is a common language created in order to overcome conflicting insights between disciplines (Repko & Szostak, 2016). Once common ground is established the insights can be fully integrated in Chapter 5: More Comprehensive Understanding.

In Chapter 1: *Awakening the Sleeping Serpent: On How Kundalini Yoga Could Influence One's Well-being* the effect of Kundalini Yoga's effect on well-being is explained by its ancient underlying philosophy, the alleged ambition to overcome suffering. Well-being is improved not once suffering is eliminated, but simply by attempting to, through practising Kundalini Yoga. In addition, in Chapter 2: *An Interdisciplinary Social Sciences Analysis of Yoga's impact on the Well-being of Adolescents*, Yoga has been proven to activate the Parasympathetic Nervous System (PNS). This indirectly increases well-being by increasing life satisfaction, the amount of positive emotions felt, and the decrease of stress. Lastly, Chapter 3: *Yoga as a Sports for Development Initiative* demonstrated the impact of the Yoga intervention as an improvement on the relationships Alexandra's youth experiences with themselves, others, and their society. These improvements lead to long-term sustainable development of the township.

The disciplines established an understanding of the impact of Yoga on the well-being of youth. However, each discipline has its own disciplinary bias, like assumptions and epistemologies. Common ground techniques from Repko & Szostak (2016) will be used to overcome the conflicts of the constructs Yoga, well-being, impact, and youth.

Construct Yoga

The three disciplinary studies have applied their own comprehension of the construct Yoga. As Philosophy self-evidently focuses on the ancient Indian philosophy of the Yoga practice, ISS and IDG make use of a more 'westernized' conception of Yoga. The difference between these concepts lies within the fact that the 'westernized' practice of Yoga generally ignores the foundation for self-realization, embedded in the ancient philosophy underlying the practice of Yoga (Garfinkel &

Schumacher, 2000). Even when thinking of Yoga as merely a system of meditation and religion, the practice of Yoga within the broader context of conscious discipline is overlooked or neglected (Garfinkel & Schumacher, 2000). In addition, IDG removes itself further away from the origin of Yoga, by exclusively classifying Yoga within the context of a sport intervention by Yoga4Alex.

Yoga is a complex and multifaceted concept, which ultimately leads to the three disciplines having wildly varying notions of Yoga. In order to create a concept of Yoga that encompasses all the complexities of these diverse notions an integration technique must be applied that incorporates all of the nuances of the three definitions without diminishing them. Using a technique such as Redefinition or Extension does not meet this standard, because it would have to fit too many subtleties of the varying notions into one definition to do them justice.

The best suited integration technique to bring together the different concepts of Yoga is Transformation, for the three concepts of Yoga used in the disciplinary sections are not only different, but oppositional as well (Repko & Szostak, 2016). This technique places the three concepts of a spectrum that creates an overview of the different usages of the concept Yoga is created, which results in an all encompassing understanding of the concept Yoga in which the ancient and the modern conceptions are combined. The spectrum is to be seen as a continuum directed by the variable of being in touch with Yoga's in-depth origins. This new spectrum ranges from the ancient Indian concept of Yoga to the more westernized or globalized notion of Yoga and thereby includes all approaches of the disciplines, resulting in the integration of these approaches.

The ancient Indian concept of Yoga includes the context in which this philosophy and practice unfolded, taking into account the cosmology Yoga is originally embedded in, as well as its ideas of suffering, liberation and reality. This concept of Yoga could be located on the far left of the spectrum, where the conception of Philosophy would be placed. ISS defines Yoga as a practice that integrates postures, breathing, relaxation, and meditation (Butzer, Bury, Telles, & Khalsa, 2016; Iyengar, 1996). This definition does incorporate the key concepts of Yoga that are in line with the ancient Indian concept - like suffering and liberation - but does not incorporate the aspect of enlightenment which is the foundation of the ancient Indian concept. The definition is thus not truly in line with the ancient Indian concept, but also not with the more westernized, modern notion of Yoga. ISS' understanding of Yoga exists therefore roughly in the middle of the newly created spectrum. Lastly, the concept of Yoga of IDG remains at the far right end of the spectrum, for it focuses on Yoga as a sport, which is far from the original idea of Yoga, which

enriches the understanding of the concept of Yoga.

Construct Well-being

Well-being is stated in the Introduction of this thesis as the following: “Wellbeing is a multifaceted phenomenon that can be assessed by measuring both subjective and objective constructs, like physical health, mental health, educational status, economic status, physical safety, access to freedom, and the ability to participate in civic life” (Anand, 2016). However, the three disciplines make use of deviating definitions of well-being in their respective chapters. To overcome these differences, common ground must be created.

Philosophy uses the concept of subjective well-being in spiritual contexts. The philosophical study on Kundalini Yoga treats well-being as described by the Yoga school of Hindu philosophy, which roughly defines an ultimate state of well-being, achieved by the elimination of suffering. Apart from this spiritual interpretation of well-being, Philosophy also makes use of the case study of Yoga4Alex and thereby mainly incorporates general subjective well-being. However, this is just a small section of the study: Philosophy sticks to its spiritual concept of subjective well-being.

ISS uses, besides subjective well-being, two domains: the health and functioning domain and the environmental domain. The model utilized by ISS is called the Nested Well-being Model and contains four domains of well-being (of which three are used by ISS) which are nestled into each other (Henriques, Kleinman, & Asselin, 2014). The relationships between the domains do not necessarily imply inter-domain exertions of influence, though this is entirely possible: the four domains of well-being are related but also separable (Henriques, Kleinman, & Asselin, 2014). The model consists of: subjective well-being, health and functioning, environmental, and the values and ideology domain.¹⁸ The last domain is not used by ISS.

¹⁸ The subjective domain is defined by not only emotional aspects - such as positive emotions and pleasure - but includes cognitive aspects as well - such as satisfaction of life, desire for life and activity (Henriques, Kleinman, & Asselin, 2014, p. 15; Yoo, 2019). The domain of health and functioning is defined as an individual's biological and psychological functioning (Henriques, Kleinman, & Asselin, 2014, p. 15). The environmental domain is defined as the context in which the individual lives and includes both social and material resources to cope with stressors (Henriques, Kleinman, & Asselin, 2014, p. 15) The values and ideology domain is defined as: an evaluative construct and the notion the evaluator has regarding the nature of the universe and the definition of the good life provide the epistemological context for which an evaluation of an individual's well-being is made (Henriques, Kleinman, & Asselin, 2014, p. 15).

IDG defines well-being as the abundance or scarcity of opportunities available to an individual. These opportunities are impacted by various factors, therefore well-being is viewed as a multidimensional concept. IDG includes eight measurements of well-being: education, subjective well-being, health, freedom, social capital, safety and security, economic capital, and citizen participation. These eight measurements are categorised by IDG within three sections of well-being: the relationship with self, the relationships with others, and the relationship with society.

Due to the complexity of well-being - as a result of the diverse range of both various objective and subjective definitions and measurements of well-being - it is crucial to establish one specific interpretation of well-being to further create a more comprehensive understanding of the research topic. Furthermore, because of the complexity, a common ground technique such as Redefinition or Extension will not suffice, for these techniques merely work with definitions that can be combined easily. Considering the complexity and diversity of the concepts and interpretations of the three disciplines, Redefinition and Extension will not guarantee a nuanced common ground with all subtleties taken into account. In addition, Transformation places oppositional definitions on a spectrum (Repko & Szostak, 2016). However, the definitions are also not simply oppositional, which disqualifies the technique of Transformation.

The best suited technique to create common ground is Organization, because this technique harbours the complexities of the definitions of well-being from each discipline whilst also creating a structured common ground without conflicts.

Organization does so by highlighting the commonalities between the different definitions of well-being and arranging them according to their relationships (Repko & Szostak, 2016). The model used by ISS (Figure 5) will be used to arrange the relationships of the definitions of well-being, because, while IDG also makes use of a model, ISS's model comprises the complexity and diversity due to the fact that the four domains suit all three disciplinary definitions and the relationships between them.

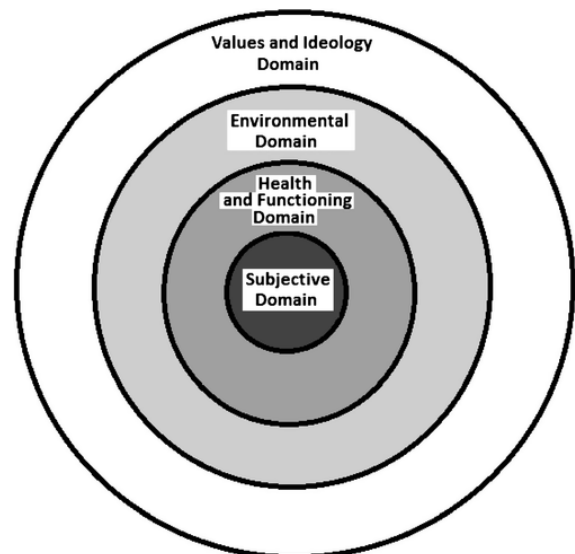


Figure 5: The Nested Well-being Model

As mentioned, ISS uses the definitions of well-being belonging to the subjective, health and functioning, and environmental domains to describe Yoga’s impact on the well-being of youth. Philosophy makes use of the definition belonging to the subjective and the values and ideology domain. IDG’s definition belongs to the subjective, health and functioning, and environmental domain. IDG’s dimensions of well-being are in conflict with the domain descriptions of the Nested Model of Well-being. The relationship with the self contains subjective well-being, education, health and freedom. The definition IDG uses for subjective well-being fits adequately within the subjective well-being domain of the Nested Model. However, the other measurements do not: those measurements fit within the domain of health and functioning and environmental. The remaining dimensions ‘relationships with others’ and ‘relationships with society’ belong within the domain of environmental well-being. Philosophy’s general definition of well-being occupies both the subjective well-being domain and the values and ideology domain. The definition of well-being from the Introduction has been used by IDG and Philosophy, though not literally, and will therefore be viewed as absorbed in the newly generated model of well-being.

The newly created organization of these definitions creates a new understanding of the construct well-being, in which the subjective domain encompasses the interpretations of Philosophy, ISS, and IDG, the health and functioning domain involves the concepts of both ISS and IDG, the environmental domain also involves both ISS’ and IDG’s interpretation, and the values and ideology domain encompasses Philosophy’s rather spiritual interpretation (see Table 4, rows Philosophy, ISS, and IDG). By categorizing the diverse definitions and thereby recognizing them in the Nested Well-being Model, the understanding of well-being is visibly shaped: both how the disciplinary conceptions of well-being fit into the model, as well as the result of the integration (see Table 4, row Common Ground). This overview provides all nuances the complex construct of well-being involves. With this common ground, a more comprehensive understanding of the thesis issue can be created.

	Subjective	Health and Functioning	Environmental	Values and Ideology
<i>Philosophy</i>	An ultimate state of well-being, achieved by the elimination of suffering			Acceptance of the unbalance of purusa and prakriti (consciousness and nature)

<i>ISS</i>	Emotional aspects (e.g. positive emotions and pleasure), cognitive aspects (e.g. life satisfaction, desire for life and activity)	Individual's biological and psychological functioning	The context in which the individual lives and includes both social and material resources to cope with stressors	
<i>IDG</i>	Subjective well-being (life satisfaction, affects, and eudaimonia (by improving one's identity development, efficacy, self-worth, self-esteem, and behavioral skills))	Physical and mental health (e.g. mental illness, and substance abuse)	Education, social capital, safety and security, economic capital, citizen participation, and freedom	
<i>Common Ground</i>	The subjective domain encompasses the degree of elimination of suffering, emotional, and cognitive aspects, and covers indicators like life satisfaction, desire for life, and activity.	The health and functioning domain includes biological and psychological functioning, which is intrinsically connected to physical and mental health.	The environmental domain describes the context of an individual life, including social and material resources to cope with stressors and is indicated by education, social and economic capital, citizen participation, and freedom.	The values and ideology domain is more personal and spiritual, and is influenced by one's acceptance of the universal unbalance of reality.

Table 4: The Domains of Well-being

Construct Well-being: Threats

In each domain of well-being, the respective disciplines have not only defined well-being but each discipline has also demonstrated the presence of factors that threaten well-being. Whether it regards subjective or environmental well-being, each domain possesses factors that inhibit well-being from flourishing. The discipline of IDG originally based the definition of well-being on three types of relationships (with self, others, and society), which have been categorized into the domains of well-being in the Nested Well-being Model. The new domains of well-being which IDG utilizes are the: subjective, health and functioning, and environmental domains. Therefore, measurements for the

relationships still exist within the new domain categorization. These measurements do not solely measure the satisfaction of one's well-being, but also threats to it.

ISS shares the same domains of well-being as IDG. ISS stipulates stress as the trigger for the activation of the sympathetic nervous system, which when it is activated too often, is according to ISS one of the biggest threats to well-being. The chronically activated SNS state and stressors are therefore the main culprits to threatening well-being according to ISS. On the other hand, Philosophy argues that, in order to increase well-being suffering one must be liberated from suffering (Sanskrit: *dukha*). This kind of suffering is foremost mental, and is mainly used in a spiritual context: suffering as a consequence of the ever changing world and all its fluctuations and unrest. Because IDG views well-being as the abundance or scarcity of opportunities available to an individual, well-being includes a satisfaction gradation. The scarcity of opportunities is therefore a threat to a satisfied well-being. This scarcity results from a low or even lack of satisfaction of IDG's eight measurements. Therefore according to IDG, all threats are related to a low satisfaction rate of the measurements, for example, high drop-out rates result in dissatisfaction within the measurement of education, and presence of violence results in dissatisfaction within the measurement of safety and security. However, as IDG did not focus on threats to the measurements within the research, the selection of threats is limited and more can be applied

The disciplines have thus highlighted widely varying factors that impede well-being in the four domains. In order to create a thorough understanding of well-being, the threats to it must be understood as well. This thorough understanding is crucial in answering the research question accurately, as the question is centered around well-being. In order to create this thorough understanding of well-being, the varying notions should be integrated.

Integrating the different threat factors to well-being through e.g. Redefinition or Transformation, does not encompass the direct relationship to the previously organized definitions of well-being. These methods of creating common ground fail to include the Nested Model of Well-being. This model is vital in our analysis of well-being and therefore should be included in integrating the factors that threaten well-being. The only technique that can include the Nested Model of Well-being through integration is Organization.

By using Organization, the different factors that are threatening well-being are organized into a similar approach as the new well-being model, which creates an inclusive overview. The process of this integration technique is presented in the rows Philosophy, ISS, and IDG of Table 5.

Without Organization the understanding of the construct well-being would be asymmetrical. Organizing the threatening factors as well as the defining elements of well-being creates symmetry. This symmetry leads to a thorough understanding of not only what adequate well-being is able to achieve, but also the threats to well-being. This lends itself to a far deeper analysis of well-being, which is vital in accurately answering the research question. The integration of the threatening factors to well-being will be executed by organizing them into the same model of the domains of well-being: The Nested Model of Well-being. By using the same model, a mirror version of the factors is being created. While the former version presents the elements of an adequate well-being per disciplinary definition, the second version is its counterpart: the version that shows the factors that threaten the well-being elements, per discipline. This results in each factor being classified according to which domain of well-being it threatens. The result of this technique - and thus the common ground of the disciplines - is presented in the last row of Table 5, called Common Ground.

	Subjective	Health and Functioning	Environmental	Values and Ideology
<i>Philosophy</i>	<i>Dukha</i> : spiritual suffering as a consequence of the ever changing world and all its fluctuations and unrest			<i>Dukha</i> : spiritual suffering as a consequence of the ever changing world and all its fluctuations and unrest
<i>ISS</i>	Low self-esteem, chronic stress which causes the over activation of the SNS leading to poorer life satisfaction.	Chronic stress which causes the over activation of the SNS leading to mental and physical health problems.	Lacking social capital as a coping resource.	
<i>IDG</i>	E.g. low life evaluation, negative emotions, absence of eudaimonia (includes e.g., lack of identity, self-worth, and self-esteem)	E.g. poor physiological health, mental illness, and substance abuse	E.g. high school drop-out, lack of friends, limited socialising, lack of social support, presence of violence and gang formation, unemployment, lack of collective identity and social solidarity, oppression,	

			poverty, and lack of freedom to make own decisions	
<i>Common Ground</i>	The threats to the subjective domain of well-being encompasses <i>dukha</i> , chronic stress (the over activation of the SNS), low life evaluation, negative emotions, lack of absence of eudaimonia (includes e.g., lack of identity, self-worth, and self-esteem)	The threats to the health and functioning domain include chronic stress (the over activation of the SNS), poor physiological health, mental illness, and substance abuse	The threats to the environmental domain describes lacking social capital as a coping resource, high school drop-out, lack of friends, limited socialising, lack of social support, presence of violence and gang formation, unemployment, lack of collective identity and social solidarity, oppression, poverty, and lack of freedom to make own decisions	The threats to the values and ideology domain is <i>dukha</i>

Table 5: The Domains of the Threats to Well-being

Construct Impact

In this thesis the impact of Yoga4Alex on Alexandra’s youth is examined. Therefore, it is crucial to establish a mutual understanding - common ground - of the construct impact. Philosophy uses the Oxford English Dictionary definition of impact: “to have a (pronounced) effect on” (2020). However, IDG’s definition of impact is: “change represents a process that could have positive or negative consequences. [However], development is reflected in the notion of progress for the recipients” (Burnett, 2009). IDG also mentioned sustainable impact, this implies positive impact lasting in long-term. ISS uses both the terms ‘impact’ and ‘sustainable change’ interchangeably, but has not defined them.

As depicted, ‘impact’ is interpreted and used in diverse ways. However, the disciplines do have similarities in their definitions, because they are conceptually alike. Their differences are linguistic, which makes Redefinition the best integration technique for this concept. If the definitions were conceptually different, Extension would have been appropriate. If their definitions

were opposed, Transformation would have been. The common meaning shared by the various definitions of the three disciplines becomes the center of one new definition, through the process of Redefinition.

Therefore, by redefining this construct it will include the critical aspects as used by each discipline. Redefining 'impact' by using the insights gathered in the disciplinary parts has led to the following definition: Impact is the extent to which any phenomenon has a (pronounced) effect, specifically resulting in a sustainable and positive change of a context, on any other phenomenon. Since impact, through redefinition, includes sustainable positive change, it is acceptable to use 'impact' and 'sustainable change' interchangeably. Sustainable change will be an aspect of great importance when answering the research question, for it is crucial to determine whether Yoga is having a sustainable impact.

Construct Youth

The construct youth implies the variation of the recipients' ages of the impact of Yoga researched in this thesis. Firstly, Philosophy did not use a conception of youth, therefore this integration will focus on the conflict between ISS' and IDG's notion of youth. Where ISS concentrates on adolescents at the age of 15 to 24, IDG departs from the participating students of Yoga4Alex's Yoga programs. These participants range from grade 8 till 12, with the estimated ages from 14 till 18. Besides, IDG also includes adolescents to its conception of youth.

The question of the thesis is centered around youth, therefore it is of great importance to create a definition of youth that includes both ISS' and IDG's understanding of youth, in order to answer the research question correctly. To create a more comprehensive understanding of the concept of youth, the technique Redefinition by Repko and Szostak (2016) will be applied. The technique Redefinition implies a textual integration which includes all disciplines definitions, as has been applied to the construct of impact as well. This is the best option for this concept, because the two disciplines of ISS and IDG share a common meaning when they describe youth. Their definitions are only linguistically different, but they are not different conceptually. Through Redefinition youth is defined as people ranging in age from 14 to 24. As a result the concept of youth includes all ages that have been researched by ISS and IDG.

Chapter 5: More Comprehensive Understanding

A more comprehensive understanding is the integration of insights to produce a new and more complete and perhaps nuanced understanding.

- Repko & Szostak

The creation of common ground in Chapter 4 has bridged the gap between conflicting disciplinary insights and integration. This chapter uses this created common ground, and the language that belongs to it, to go beyond disciplinary perspectives towards interdisciplinary insights. Through the creation of common ground, a more comprehensive understanding has been made possible of the well-being of the youth of South Africa and how Yoga is able to impact it. In short, this chapter will answer the following question: How is Yoga able to impact the well-being of youth in Alexandra township?

How Yoga impacts the well-being of youth in Alexandra is a complex issue that encompasses diverse intertwining aspects. Ultimately, well-being is influenced by a great number of indicators, of which several are positively stimulated by Yoga. The core instrumentality of Yoga in influencing the impact of well-being is a multi-faceted and greatly interesting phenomenon. Analyzing this phenomenon by making use of the gained insights, without oversimplifying the content, creates a more comprehensive understanding that will distinguish the role of the background of Yoga, how the impact of Yoga is executed, and how this ultimately impacts the youth of Alexandra.

The Origin of Yoga

The roots of Yoga explain why this imported practice made its way into developmental programs and NGO's: attempting to eliminate suffering. The spiritual quest for the elimination of suffering, which was expressed in ancient India, still resonates in modern practice. However, this merely provides a starting point from which to depart when describing Yoga's influence on well-being. Suffering can be seen as a threat to well-being, e.g. spiritual suffering, or stress impacting several aspects of well-being. Eliminating these threats to well-being - or at least attempting to eliminate them - can positively impact one's well-being. This is exactly what Yoga seems to execute: it

strengthens the positive influences on well-being on one hand and weakens threats to well-being on the other hand.

The Impact of Yoga on One's Well-being

How Yoga executes the alleviation of suffering is through its practice and its benefits in the four domains of well-being (see Figure 5). Firstly, the practice of Yoga is beneficial to the first domain: the subjective well-being. The spiritual aspect of Yoga is beneficial to the domain of subjective well-being, as it provides a metaphorical path towards ultimate well-being by practicing Yoga in successive steps. Solely being on this path, without having reached the final stage yet, can improve one's well-being. When looking at empirical data, Yoga is able to improve subjective well-being by activating the parasympathetic nervous system (PNS) and downregulating the sympathetic nervous system (SNS), which positively influences life satisfaction and positive emotions. The PNS system is also a trigger for a sense of accomplishment to be felt, which increases self-esteem. Higher self-esteem in turn leads to improved subjective well-being.

This improved self-esteem is one of triggers towards improving the second domain of well-being: health and functioning domain. This is due to the impact of self-esteem, because self-esteem determines how well one is able to cope with stress. The prolonged effects of stress can lead to disease or other mental and physical health issues. However, self-esteem is not the only factor that aids in dealing with stress: the positive emotions felt through the practice of Yoga help counteract the negative effects of stress as well.

These emotions also generate an improve the third domain of well-being: The Environmental Domain. Positive emotions make an individual more open and more understanding towards other people, which can help improve their relationships with others. Another factor that helps improve relationships is social capital. Organizations like Yoga4Alex make investments of social capital in the youths they teach and support. This investment of social capital is vital in coping with stressors, because it acts as a coping resource. Besides, social capital also helps people to build social networks, which is able to generate feelings of trust. The building of the social networks may indicate long-term and sustainable social impact as it sparks a positive impact chain: the investment of social capital produces social networks, social networks create social capital once more, and so on. Of course this possible positive feedback mechanism should be studied more to

verify its existence, but the implications could be significant for social development. Regardless of long term social impact, the current results indicated significant positive impact to the environmental domain of well-being.

The final domain: the domain of values and ideology is also positively impacted, because Yoga is beneficial in terms of the stimulation of individuals to accept their everyday reality and experience internal peace. Yoga thus positively influences the four domains of well-being whilst at the same time decreasing the power of some of the threats to well-being: stress, low self-esteem, negative emotions, lack of social capital and *dukha*.

The Scale of Yoga's Impact on one's Well-being

The ways Yoga is able to impact well-being as described above are intertwined and influence each other. Again, Yoga's impact is a holistic, complex practice. This is affirmed by the observation of the interconnectedness of the various ways of the impact. However, the indicated impact in all four domains leaves Yoga as an important instrument to be used when the goal is to improve one's well-being.

Considering the execution of the positive influence on well-being, the focus will now shift towards the impact Yoga is able to establish on individual youngsters, and perhaps in the long-run on international development. Yoga4Alex is able to reach out to at-risk youth in the challenging environment of Alexandria. The Yoga4Alex intervention has potential to improve the well-being of Alexandria's youth, due to the positive benefits of practicing Yoga.

The benefits of Yoga in the four domains of well-being, in addition to the reflexive, dynamic relationship between these benefits makes the exact impact on well-being a hard to define issue. Nonetheless, the benefits of Yoga can be widespread and far-reaching. Therefore, if Yoga4Alex is able to fulfil the promises of an improved well-being through Yoga, the positive feedback mechanism might spark a chain of positive impact towards sustainable social development.

Conclusion

Essentially, Yoga is able to positively impact the well-being of youth in Alexandria. However, the impact of Yoga on well-being is complex due to the interconnectedness of the several ways Yoga's

impact is executed. Ultimately, that Yoga positively impacts one's well-being can be traced back to the original practice in ancient India. Even though its impact was not based on scientific evidence, well-being was - and, thus, still is - the goal of the practice. However, this research has been able to offer empirical confirmation of Yoga's positive multidimensional impact. According to this empirical evidence, Yoga is able to positively influence three dimensions of well-being - subjective, health and functioning, and environmental - whilst diminishing the threats to establish well-being. Even though the fourth dimension - values and ideology - is not yet empirically proven through this research, it remains within the foundation of the ancient philosophy. To sum, Yoga offers a multidimensional toolbox to enhance one's well-being.

With Yoga as a tool, Yoga4Alex tries to improve the well-being of the youth in Alexandra. Based on limited empirical data, it can be argued Yoga4Alex fulfils its promise. However, acknowledging the complexity of the impact, Yoga should not be claimed to be the only or the best solution to the problems of at-risk youth. Furthermore, this research has solely focused on the positive impact of Yoga on well-being, and therefore has neglected possible negative influences. Also, this depiction of the influence of Yoga on well-being is a somewhat simplistic illustration of reality. Due to the fact that how Yoga influences the well-being of youth in township Alexandra is a multifaceted issue and positively influences many aspects of well-being, but should not be determined to be the perfect method of increasing the well-being of youngsters in South Africa. Even though this cannot be simply claimed, Yoga is able to offer a multidimensional toolbox to improve the well-being of all four domains of the youth in Alexandra township. Therefore, if Yoga4Alex is able to fulfil the promises of an improved well-being through Yoga, the positive feedback mechanism might spark a chain of positive impact towards sustainable social development. All in all, Yoga is a legitimate option when the goal is to stimulate one's general well-being, for Yoga's positive influence covers many aspects of well-being.

Chapter 6: Discussion and Reflection

Discussion

This thesis offers a holistic understanding of the impact of Yoga on the youth in Alexandra. However, this research has only examined the positive impact of Yoga, and therefore neglected the possible negative implications of Yoga's philosophy, practice, and as an intervention. Besides, the sustainability of a Yoga intervention to improve one's well-being in the long run is still questionable. As mentioned in the previous chapter, once a student graduates secondary education, they no longer have access to the Yoga4Alex intervention. Therefore, it is not sure whether a person will continue the practice of Yoga, or whether this practice might come to a hold. However, it is certain that the benefits of Yoga are significant during secondary education, which the student's well-being, thus enhances educational success, and therefore improves job opportunities.

In addition, we have to be aware of our personal bias. As Yoga4Alex and Alexandra are beyond our personal scope, it is important to acknowledge our relationship with both. Firstly, our relationship with Yoga4Alex is not completely integrated. We as academics have not been able to visit the NGO and their Yoga interventions and are not part of their initiatives. Therefore, all our information from Yoga4Alex has been through email exchange, skype calls and their online available information. In addition, an NGO has their own agenda, and it is not an academical institute. Therefore, we cannot validate the completion of academic requirements within their sources.

Secondly, we have to be aware of our own bias towards the circumstances of Alexandra. We are privileged white educated women, born and raised in the Netherlands. The Netherlands is one of the most developed countries, and poverty has different characteristics in comparison to poverty in South Africa ("2019 Human Development Index Ranking | Human Development Reports", n.d.). As part of the Global North, we are raised for example with television shows and commercials illustrating Africa as the continent of poverty, and hunger. Because we have not been to, lived in, and grown up in South Africa, let alone in Alexandra, we have little knowledge of the on-the-ground context. Thus, due to the lack of this on-the-ground context, our understanding of Alexandra and their residents has heavily contributed to our own bias.

Critical Awareness

In order to complete this research process, we should critically reflect upon this project and the choices that were made within its process. Starting off with the reflection upon the content of this study, divided up in disciplinary and interdisciplinary reflection, our possible biases will then be covered, and we will work towards eventually evaluating the research process. The aim of this study was to provide a holistic understanding of how Yoga4Alex is able to impact the well-being of youth in Alexandra township; to analyze Yoga4Alex's mission towards breaking the cycle of poverty, by increasing the well-being of the youth, and in the long-term increasing job opportunities. This goal was relatively optimistic, as a bachelor's thesis of students in Utrecht generally does not have the leverage to directly influence organizations aspiring to help youngsters to break out of the cycle of poverty. This idealistic objective does not, however, affect the ambition of this thesis, for we believe one should always aim high to make an impact.

Although the disciplinary insights contributed greatly to the overall thesis, several choices made in the disciplinary parts leave room for improvement. Firstly, even though Philosophy has provided an inclusive perspective of the underlying philosophy of Yoga and Kundalini Yoga, this discipline could have added insights into the philosophy of education (including philosophy of pedagogy), for this research predominantly focuses on youth. The discipline of ISS has explained the impact of Yoga predominantly through psychology and sociology. However, ISS also consists of cultural anthropology which could have been incorporated more intensely for a more well-rounded analysis. Lastly the perspective of IDG established a context based understanding of the impact of Yoga, by looking specifically at Yoga as a development intervention. However, IDG did focus on Yoga as a sport, and therefore limited possible additional benefits and negative impacts of Yoga as an intervention.

The disciplinary expertise expressed in Part I was written separately. Therefore, we had to study the sometimes alien concepts of our colleagues specialized in a field of study that is not our own. Even though a discipline isn't taught in a few weeks, we were able to understand each other's study and findings, and communicate about our differences. The understanding and communication were relatively easily accomplished, due to the fact that two of the disciplines (ISS and IDG) both belong to the Social Sciences.

Apart from critically analyzing the disciplines we did use, we should consider disciplines we didn't use as well. Upon reflecting additional disciplines, three disciplines would have

complemented this research: Economy, Psychology, and Biology. Economy would, first of all, provide more insight into the mechanisms of the cycle of poverty and the overall economic situation of the youth mentioned in this thesis, providing specific knowledge about one of the objective well-being measurements. Secondly, even though ISS dedicated a section to this phenomenon, Psychology could offer a more extensive understanding of the construct of subjective well-being, for this of great importance and should be elaborated more thoroughly. Biology could, lastly, add the needed information on the physical exercise of Yoga and how Yoga could influence the physical well-being of youth. Including these three disciplines within the thesis would potentially create an even more holistic understanding of the problem studied.

Progressing to a critical analysis of the interdisciplinary content of this thesis, the theory of Repko and Szostak (2016) will be used to conduct this analysis. First of all, we should question whether or not our conclusions indicate the advancement of an understanding by the integration of disciplinary views. Did this thesis “yield a new, richer, deeper, broader, or more nuanced understanding of the problem?” (Repko & Szostak, 2016). First of all, the results of this study are more inclusive compared to disciplinary studies, for the interdisciplinary approach has enabled the combination of different indicators of different domains impacted by the practice of Yoga. From spiritual liberation to GDP per capita: an inclusive perspective on Yoga’s impact on the indicators of well-being has been created by opening up the scope. The interdisciplinary approach was necessary because of the complexity of the studied issue, but asked for more than solely Philosophy, ISS, and IDG. As stated above, other disciplines could have been involved to add specific information and necessary perspectives, as to create an even more comprehensive understanding.

The Research Process

Lastly, it is important to reflect upon the process of this thesis. First it is important to address all communication within our process. The thesis depended on good communication between the research members, their disciplinary advisors, and the thesis supervisor. Because of the planned weekly meeting, we were able to benefit from regular contact. This helped us to stay up to date on our progress regarding the thesis, and our personal lives. Myrthe communicated at the beginning of the process that she experienced stress symptoms for a while, to inform the team as soon as possible. During the entire process, she has regularly informed the other members on her well-

being, to avoid miscommunication and discuss expectations. This was elaborated in our divisions of tasks, as well all other personal circumstances of all of us. Eva was unavailable when the first draft of the Introduction was written due to the fact that she was moving to her new apartment, and Fabienne was less available during the last few days before the deadline due to stress. The sudden COVID-19 pandemic impacted everyone. However, we continued our weekly meetings. And especially during the final phase we had extra regular meetings to establish optimal communication. In addition, each member has maintained contact with their own disciplinary advisors. However, due to the changing context of stress levels, and especially adjusting to the COVID-19 measures, this contact could have been more regular for some of us. Therefore, some of us have not received the minimal of 3 meetings with the supervisor, and also less feedback moments. This may have affected the quality of the thesis. Lastly, we have had thorough contact with our thesis supervisor. We were able to ask many questions, and received an additional meeting, due to the special circumstances. We have also communicated well about our personal circumstances. Therefore, we gained a lot of knowledge, insights and support through this relationship.

The integration of the disciplinary insights was difficult. Miscommunication occurred about the function differences between the Common Ground and the More Comprehensive Understanding. Luckily, our thesis supervisor helped us define the constructs and give us advice for approaching the integration. Especially constructs which were embedded in disciplinary assumptions, and therefore not defined specifically within each disciplinary chapter, were difficult to define separately before integrating them.

Creating the More Comprehensive Understanding took a lot of our creative ability and we had to communicate intensely to make sure we preserved the complexity of our interdisciplinary answer to the research question. Though it was an intense process, we succeeded in creating the holistic understanding as we imagined.

Appendix A: Overall Literature

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Appendix C: Additional Disciplinary Tables & Figures

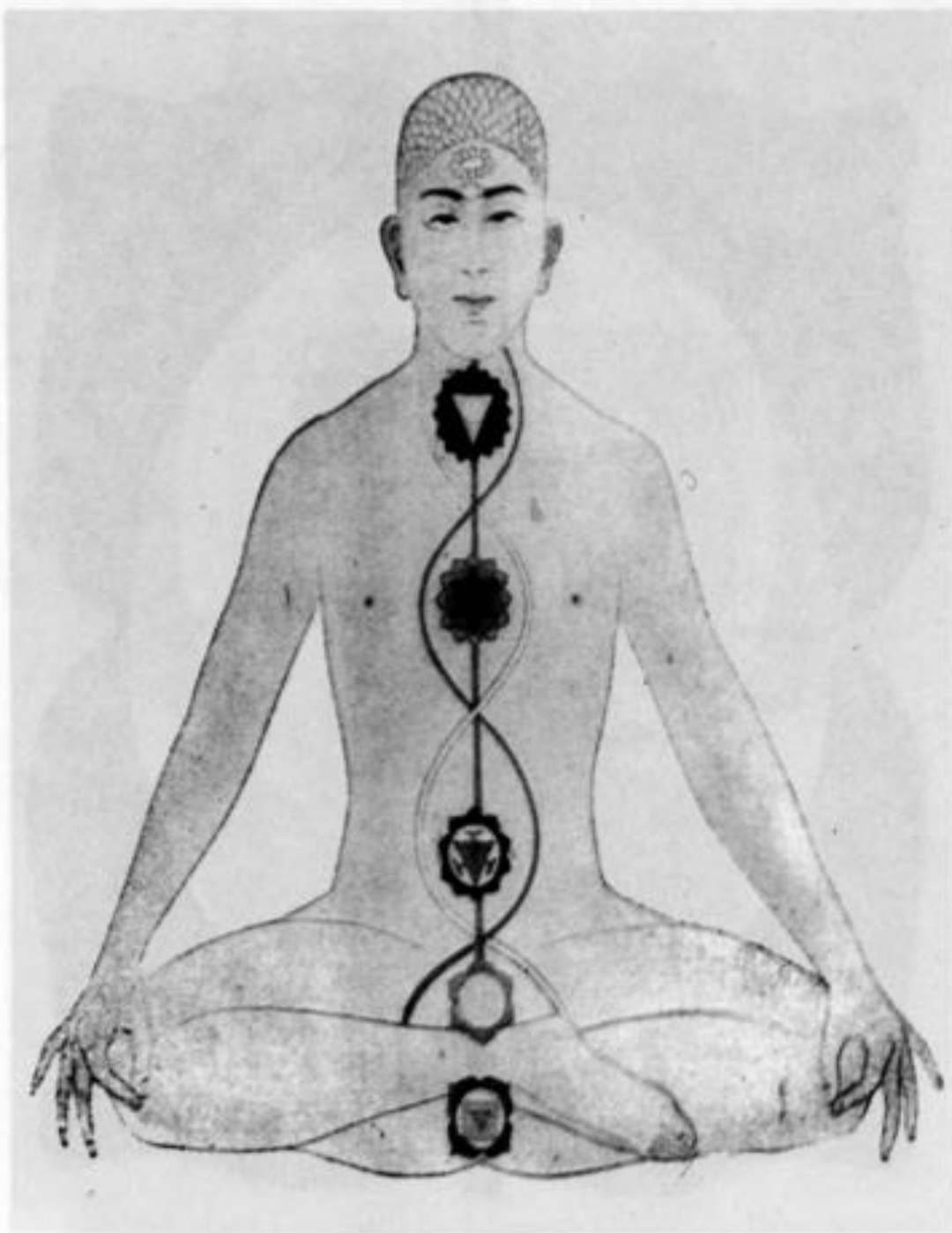
Chapter 1: Awakening the Sleeping Serpent: On How Kundalini Yoga Could Influence One's Well-being

Table 6: Patanjali's Eight Limb Path of Yoga.

1.	<i>Yama</i>	Five general ethical principles: non-harming; non-lying; non-stealing; conducting consistent with Brahman; non-hoarding	External practice → Hatha Yoga
2.	<i>Niyama</i>	Five special principles of self-restraint: cleanliness; contentment; zeal for Yoga; self-study; surrender (to god)	
3.	<i>Asana</i>	Appropriate postures for meditative absorption	
4.	<i>Pranayama</i>	Breathing techniques	
5.	<i>Pratyahara</i>	Withdrawal of the senses	
6.	<i>Dharana</i>	Concentration; intense focus	
7.	<i>Dhyana</i>	Meditative absorption; meditation	Internal Practice → Dhyana Yoga
8.	<i>Samadhi</i>	Entasy/extasy; state of oneness; total absorption	

Sources: Feuerstein, 1989; Feuerstein, 2008; Jacobsen, 2008.

Image 1: Chakras



Source: Jung & Shamdasani, 1996, p. xlvii.

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Appendix D: Pre-SKY Fest Survey

are you important to yourself?yes/no then rate out of 10	yes	yes10	yes10	no5
do you find it difficult to ask for help?yes/no then rate out of 10	no	yes8	no6	yes6
do you sometimes feel helpless?yes/no then rate out of 10	no	yes9	no3	no7
do you have anger issues?yes/no then rate out of 10	yes	yes10	yes5	no0
do you feel you don't matter to others?do you feel you need to be accepted by others?yes/no then rate	yes	no10	no3	yes6
do your thoughts confuse you sometimes?yes/no then rate out of 10	yes	no9	no2	yes9
do you get anxious easily? Yes/no then rate out of 10	yes	yes10	no4	yes8
do you have a mentor in your life,and how often do you meet with them?	no	no	yes, a spiritual one. Everyday	no
name two things you would want to change at school	stop playing and work hard in my	subjects and teachers	learners and teachers attitude	issues of buying and selling drugs
what recent choice have you made recently that you are proud of	being a good person	making my own decisions	I decided to stop hanging with	career field
what do you want to be when you grow up	chief	haliday representative	artist	fine artist
what recent experience made you happy	love	being self confident	climaxing of butterfly	nothing
why did you choose to go to skyfest	because I love skyfest	i am a yogi	I wouldn't miss it for a world	I can get rid of anxiety easily
have you attended skyfest before	yes	yes	yes	yes
who do you live with	mother	father	mom,dad,little sister	uncleand younger brother
school	minerva	minerva	alexhigh	alexhigh
grade	12	12	11	12
age	21	18	17	17
No.	1	2	3	4

	are you important to yourself?yes/no then rate out of 10	yes10	yes10	yes10	yes3	yes10
	do you find it difficult to ask for help?yes/no then rate out of 10	no8	yes9	yes4	no10	yes7
	do you sometimes feel helpless?yes/no then rate out of 10	yes7	yes8	yes3	no9	yes7
	do you have anger issues?yes/no then rate out of 10	no2	no2	no0	no3	no9
	do you feel you don't matter to others?do you feel you need to be accepted by others?yes/no then rate	no4	yes10	no0	no7	yes5
	do your thoughts confuse you sometimes?yes/no then rate out of 10	yes9	yes9	yes5	no6	yes7
	do you get anxious easily? Yes/ no then rate out of 10	no3	no1	no0	no4	no6
	do you have a mentor in your life, and how often do you meet with them?	yes, everyday	yes, once a month	no	yes and everyday	no
	name two things you would want to change at school	dirtiness and behaviour	rules and customs	the way teachers teach and behaviour	more yoga classes and great security	drugs and alcohol
	what recent choice have you made recently that you are proud of	to stay positive and believe in myself	letting go of the past	to focus on my school work and address	going to a yoga class	finding people that love me, getting to
	what do you want to be when you grow up	social worker	chartered accountant		a vet	IT
	what recent experience made you happy	swimming	to attend yoga	to meet new people	my first yoga class	seeing all my friends happy and seeing
	why did you choose to go to skyfest	because I havent been there, to	to be able to make better choices	yoga helps me focus and control myself	to focus	to find peace with myself and know
	have you attended skyfest before	no	yes	yes	no	no
	who do you live with	grandmother	mother	mom, brother, sister	mom, dad and 9 brothers	father
	school	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh
	grade	11	12	10	8	10
	age	18	18	16	14	18
	No.	5	6	7	8	9

are you important to yourself?yes/no then rate out of 10	yes10	yes9	yes10	yes10	yes10	yes10
do you find it difficult to ask for help?yes/no then rate out of 10	yes5	yes10	yes4	yes8	no7	yes6
do you sometimes feel helpless?yes/no then rate out of 10	yes6	yes7	yes6	yes10	yes6	yes6
do you have anger issues?yes/no then rate out of 10	no5	yes8	no2	yes7	no1	no1
do you feel you don' t matter to others?do you feel you need to be accented by others?yes/no then rate	no5	yes10	yes5	no1	yes6	yes6
do your thoughts confuse you sometimes?yes/no then rate out of 10	yes5	yes9	no8	yes6	yes5	yes5
do you get anxious easily? Yes/no then rate out of 10	yes3	yes10	yes7	no0	no0	no0
do you have a mentor in your life, and how often do you meet with them?	yes	no	no	no	no	no
name two things you would want to change at school	everything	bullying and teaching	attitude and books	drugs and bullying	tablets and textbooks	
what recent choice have you made recently that you are proud of	not smoking and drinking	not having friends	committed to education and	joining yoga and being able to forget	living my life as I please and being	
what do you want to be when you grow up	designer	arthopedic surgeon	arthopedic surgeon	doctor	doctor	
what recent experience made you happy	drawing music and food	effects of the programme	helping others with school work and	when I do breathing I can calm myself	playing games	
why did you choose to go to skyfest	for fun and to meet new people	yes	to be flexible	to get help and get back my life	to find peace and release stress	
have you attended skyfest before	no	no	no	no	yes	
who do you live with		father and siblings	mom and sister	mother, father and siblings	mom and siblings	
school	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh	
grade	11	11	11	11	11	
age	16	16	16	16	16	
No.	10	11	12	13	14	

	are you important to yourself?yes/no then rate out of 10	no6	yes10	yes10	yes8	yes10	yes9
	do you find it difficult to ask for help?yes/no then rate out of 10	yes5	no8	no10	no6	yes4	yes7
	do you sometimes feel helpless?yes/no then rate out of 10	yes3	yes3	yes7	yes9	yes5	yes6
	do you have anger issues?yes/no then rate out of 10	yes8	no10	no0	no7	no3	no4
	do you feel you don't matter to others?do you feel you need to be accepted by others?yes/no	yes7	no7	yes10	no4	no5	yes5
	do your thoughts confuse you sometimes?yes/no then rate out of 10	yes4	yes5	yes10	yes8	yes6	yes8
	do you get anxious easily? Yes/no, then rate out of 10	no7	yes5	yes8	yes5	yes7	no3
	do you have a mentor in your life, and how often do you meet	no	no	yes	no	no	no
	name two things you would want to change at school	smoking and bullying	pass rate and substance abuse	littering and abuse	bullying and smoking	behaviour and equality	behaviour and pass rate
	what recent choice have you made recently that you are proud of	to be part of the iam movement	being responsible	focusing on myself	respecting and being discipline	choosing friends with the same	choosing yoga
	what do you want to be when you grow up	not sure	lawyer	not sure	actress	physcotherapist	tv presenter
	what recent experience made you happy	going to kzn	sleeping and not opening my eyes	I passed maths	going to skyfest	having my own room	knowing how to swim
	why did you choose to go to skyfest	to help me be calm before my	to release stress		manage my problems	relax mind	I need fresh air
	have you attended skyfest before	yes	yes	yes	yes	yes	yes
	who do you live with	both parents and siblings	mom and grand mother	mom and brother	mother	parents and siblings	family
	school	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh
	grade	11	11	11	11	11	11
	age	17	17	17	17	17	17
	No.	15	16	17	18	19	20

	are you important to yourself?yes/no then rate out of 10	yes10	yes10	yes10	yes9	yes10	yes10
	do you find it difficult to ask for help?yes/no then rate out of 10	yes	yes9	no1	yes8	yes7	yes7
	do you sometimes feel helpless?yes/no then rate out of 10	yes7	yes2	yes7	yes7	yes4	yes4
	do you have anger issues?yes/no then rate out of 10	no6	no0	no6	yes9	no0	yes3
	do you feel you don't matter to others?do you feel you need to be accepted by	yes9	yes6	yes6	yes6	no1	yes7
	do your thoughts confuse you sometimes?yes/no then rate out of 10	yes9	yes3	no3	yes7	yes6	yes10
	do you get anxious easily? Yes/no, then rate out of 10	yes10	no0	yes8	yes9	no3	no8
	do you have a mentor in your life, and how often do you meet	yes, 4days a week	no	no	yes, twice a month	no	no
	name two things you would want to change at school	violace and girls behaviour	behaviour and marks	littering and learners mindset	teenage praanancy and	have more study resources and	bullying and littering
	what recent choice have you made recently that you are proud of	that iam going to matrix pilot	not listening to my needs social worker	speaking about what I believe not sure	to be happy and remain hard in judge	studying hard for tests pilot	choosing to live my life gynacologist
	what recent experience made you happy	coming to camp	going to camp	winning airtime	meditation	visiting my aunt	my last yoga class
	why did you choose to go to skyfest	I wanna know more about yoga	to help my body	to find peace	to experience yoga	to learn more yoga	because I attend skyfest
	have you attended skyfest before?	yes	no	no	no	no	no
	who do you live with	mom,dad,sister, brother	mom,dad,two brothers	both parents and siblings	mom,dad,sister	mom,brother	brother
	school	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh
	grade	11	11	11	11	11	11
	age	17	17	17	17	18	18
	No.	21	22	23	24	25	26

	are you important to yourself?yes/no then rate out of 10	yes10	yes10	yes10	yes10	yes10	yes10
	do you find it difficult to ask for help?yes/no then rate out of 10	no6	yes5	no3	yes8	yes10	yes10
	do you sometimes feel helpless?yes/no then rate out of 10	no2	yes7	yes8	yes10	yes5	yes9
	do you have anger issues?yes/no then rate out of 10	no2	yes10	no0	yes6	yes9	no3
	do you feel you don't matter to others?do you feel you need to matter?yes/no then rate out of 10	yes5	yes8	yes10	no0	yes8	yes7
	do your thoughts confuse you sometimes?yes/no then rate out of 10	no2	yes5	yes10	yes3	yes10	yes8
	do you get anxious easily? Yes/no then rate out of 10	no4	no0	no0	yes5	yes10	yes5
	do you have a mentor in your life and how often do you meet	no	no	no	yes twice a month	no	no
	name two things you would want to change at school	have respect to class mates and iam a hard worker	banking and i never give up	behaviour and respect	teenage dragnancy and to speak truth in the world	studies and markd	smoking and banking
	what recent choice have you made recently that you are proud of	paleontologist	actor,director and writer	believing in myself	doctor	positive and strong	being a church aid and still
	what do you want to be when you grow up			lawyer		business coomen and musician	police woman
	what recent experience made you happy	I forgot about past accident	nothing	prosperity and communication	to make peace	communicationsg and being with others	I can ask for help
	why did you choose to go to school	to relieve stress	to find peace	yoga helps me	I waana learn more about yoga	yoga helped me a lot	I need it
	have you attended skyfest before?	yes	no	yes	no	yes	yes
	who do you live with	both parents	mom,dad,sister	parents	mom,grandma and sister	granny	mother
	school	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh
	grade	11	9	9	9	9	9
	age	18	15	15	15	15	15
	No.	27	28	29	30	31	32

	are you important to yourself?yes/no then rate out of 10	yes10	yes5	yes10	no0	yes10	yes10
	do you find it difficult to ask for help?yes/no then rate out of 10	yes10	no5	yes9	yes8	no9	yes5
	do you sometimes feel helpless?yes/no then rate out of 10	yes9	yes5	yes4	no2	no1	yes10
	do you have anger issues?yes/no then rate out of 10	no5	no2	no6	no0	no2	no0
	do you feel you don't matter to others?do you feel you need to be accepted by others?yes/no then	no3	yes8	yes8	yes6	yes4	yes5
	do your thoughts confuse you sometimes?yes/no then rate out of 10	yes8	yes9	yes9	yes3	no3	yes7
	do you get anxious easily? Yes/no then rate out of 10	no3	no1	yes10	no7	no2	no0
	do you have a mentor in your life and how often do you meet	yes	no	yes	no	no	no
	name two things you would want to change at school	principal and smoking zone	smoking and politics	behaviour and bullies	progress and substance abuse	smoking and bullying	drugs sold at school
	what recent choice have you made recently that you are proud of	making my family proud and achieve	living in alex	to make my family proud of	to speak truth in the world	to attend skyfest	joining yoga
	what do you want to be when you grow up	vet	pilot	fashion designer	a rapper	animator and illustrator	pilot
	what recent experience made you happy	playing chess	exercise and meditation	having a pappy	a lot	when people respect my love	nothing
	why did you choose to go to skyfest	to know more about yoga	I enjoy yoga	I wanna relax	to find peace	iam serious about yoga	to clear my mind and be positive
	have you attended skyfest before	yes	no	no	no	yes	no
	who do you live with	mother	grand mother/grandfather and 9 brothers	my parents	dad	parents and 8 siblings	parents
	school	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh
	grade	9	9	9	10	10	10
	age	15	15	16	15	17	19
	No.	33	34	35	36	37	38

	are you important to yourself?yes/no then rate out of 10	no1	yes10	yes10	yes9	yes10	yes10
	do you find it difficult to ask for help?yes/no then rate out of 10	yes7	yes8	yes9	no10	yes5	no5
	do you sometimes feel helpless?yes/no then rate out of 10	yes5	yes8	yes5	yes5	yes7	yes9
	do you have anger issues?yes/no then rate out of 10	yes9	no0	no1	yes9	no3	no4
	do you feel you don't matter to others?do you feel you need to be	no10	yes10	no2	yes7	yes6	no5
	do your thoughts confuse you sometimes?yes/no then rate out of 10	no10	yes6	yes8	yes10	yes8	yes7
	do you get anxious easily? Yes/no then rate out of 10	no1	yes10	yes6	yes8	no5	yes10
	do you have a mentor in your life,and how often do you meet	no	no	no	yes,everyday	no	yes,every week
	name two things you would want to change at school	littering aznd smoking	improve sanitary,toilets and add sports	respect,behaviour	teenage pragnancy and career choice	type of food and study hours	lack of motivation and dirtiness
	what recent choice have you made recently that you are proud of	joining yoga	living my way and cutting wrong	to constantly behave in my self	taking responsibility of	choosing who iam	submitting my school work on
	what do you want to be when you grow up	business entrepreneur	anything long as I help people	a 3d animator in desney	a 3d animator	orthorpedic	annimator
	what recent experience made you happy	that iam goin to skyfest	interacting with other people	performing for the inner city festival	I finished my visual arts	swimming	my sister baught me chocolate
	why did you choose to go to skyfest	to do more yoga	to clear my mind and be positive	for more experience in yoga	I love doing yoga	yoga teaches different things	to distress
	have you attended skyfest befor	no	no	no	yes	yes	yes
	who do you live with	mom ,dad	guardian	my sister and 3 children	mom,sister and nephew	mother	mom and siblings
	school	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh
	grade	8	12	12	12	12	12
	age	12	17	17	17	17	17
	No.	39	40	41	42	43	44

	are you important to yourself?yes/no then rate out of 10	yes10	yes7	yes10	yes10	yes10	yes10
	do you find it difficult to ask for help?yes/no then rate out of 10	no6	yes6	yes10	no2	yes9	no10
	do you sometimes feel helpless?yes/no then rate out of 10	yes4	yes6	yes10	no4	yes10	no5
	do you have anger issues?yes/no then rate out of 10	no0	no9	yes6	no6	no10	no10
	do you feel you don't matter to others?do you feel you need to be accepted by others?yes/no	no10	yes5	yes9	no1	yes8	no9
	do your thoughts confuse you sometimes?yes/no then rate out of 10	yes5	no7	yes8	yes8	yes5	no10
	do you get anxious easily? Yes/no, then rate out of 10	no2	no8	no5	no	no4	no8
	do you have a mentor in your life, and how often do you meet	no	yes,every two weeks	yes and everyday	no	no	no
	name two things you would want to change at school	the way people think of their friends and	pollution and illegal substances	behaviour and feeding scheme	hospitality and reduce violence	smoking and fighting	toilets and smoking
	what recent choice have you made recently that you are proud of	I reduced a lot of friends and	to study animation next	choosing yoga as my meditation	staying out of trouble	choosing yoga	complete my grade 12
	what do you want to be when you grow up	a geologist	professional animator	actress and tv presenter	journalist	events planner and yoga teacher	teacher
	what recent experience made you happy	being accepted in varsity	performing at the hiltrow there	2018 skyfest	celebrating my friends birthday	nothing	studying to
	why did you choose to go to skyfest	to be able to communicate	I attended yoga the whole year	its where I can feel who iam	I wanna explore	to clear my mind	to relax my mind
	have you attended skyfest before?	yes	no	yes	yes	yes	no
	who do you live with	mother	mom and sister	family	mom	mom,dad and sister	mom,dad and sister
	school	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh	alexhigh
	grade	12	12	12	10	12	12
	age	17	17	17	15	20	17
	No.	45	46	47	48	49	50

Appendix E: Post-SKY Fest Survey

Has your family's attitude changed since SKY Fest?	Yes, I have changed	Yes, they don't shout	Good	I'm more understanding	Yes, they are happy with me	Yes	We over come our differences	No	Yes
Describe your relationship with your family who takes care of you		They love me	Good	Close		We have love and communicate	It is really good	All parents have love	Its much better now
Did you make new friends?	Yes	yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Do you feel the effect of SKY Fest?	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Did Something shift within you?	Yes, My anger	No	Yes, Yoga	Feeling free	Yes, I made new friends	Yes, Im happy	Yes, The way I act towards others	No	Yes, I found peace within
Did You enjoy SKY Fest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
School	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex high	Alex High
Grade	9	11	9	11	9	9	11	11	11
Gender	Female	Female	Female	Male	Female	Female	Female	Female	Female
Age	16	17	14	17	15	15	16	17	16
No.	1	2	3	4	5	6	7	8	9

Do you think you can learn to speak quietly for the whole of Sky?		No, I'm Loud			Yes	Yes	No	Yes	Yes	Yes
		Nothing			Fun	Nothing	Happiness	Having fun and enjoying myself	Nothing	Nothing
What did you gain from the swim time?		Nothing								
What did you gain from the yoga sets you did?		Knowledge			I am mentally strong	Peace in my mind	I have God, my teachers and my parents	Patience and determination	Trust and confidence	I gained knowledge on ways to be calm
Do You have a mantor?		Thuso Mbedu			N/A	Sister Rachel		Yes	No	Mam Bongli
Has your attitude to your self changed?		Yes, I respect myself			I'm positive	Yes, I'm Happy	I am noe focused	I always think positive	No	No
Has your attitude to school work changed?		Yes, I'm concentrati ng			I'm more focused	No		Yes, Do yoga before I study	No	Yes
No.	1	2	3	4	5	6	7	8	9	

Do you have a message for your principal?		No				No		Thank you for trusting us and giving us a chance	Thank you for the opportunity	Thank you for allowing yoga to come to our school		Thank you for allowing yoga in our school
Do you have a message for your yoga teacher?		Thank You				Yes I would like to thank Bongli		Thank you so much	I love and appreciate you	I am grateful and I really love them	Yes	Thank you for yoga
How can Yoga4Alex help you become the best version of yourself?		Meditation and health & self love				More sets and meditations		No to give up n life	Help me to be myself, love myself and overcome my problems	It helps me boost my confidence and have a positive mood towards everything	By helping me with facing challenges and solving them and also learn how to meditate	keep doing yoga because it keeps me calm
Do you plan to carry on doing yoga after school next year?		Yes				Yes		Yes	Yes	Yes, definitely	Yes	Yes
What do you understand by a Yogic way of living?		Health and self love				Feel Free		Eating healthy food	Healthy living	It is hard but interesting	Trust yourself and be one	Its peaceful amazing and healthy
No.	1	2	3	4	5	6	7	8	9			

Has your family's attitude changed since Sky Fest?	Yes, I am able to control my temper	I love and respect them more	Because I found peace	Yes	Yes, I'm happy	No	Yes	No, It is still good	No
Describe your relationship with your family who takes care of you	We are now getting along	Calm and connected	They are loving	Awesome	We are happy, they love me and they care for me	Happy	Respect		Kind and caring
Did you make new friends?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Do you feel the effect of Sky Fest?	Yes	Yes, meditation	Yes	Yes	No	Yes	Yes	Yes	Yes
Did Something shift within you?	No	Yes	I have joy	I was at peace	I feel happy and free	Yes, my mindset	Yes, My heart	Yes, I am happy and relieved	Yes, self esteem
Did you enjoy Sky Fest?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
School	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex high
Grade	11	11	8	10	9	11	11	9	12
Gender	Female	Female	Male	Female	Male	Female	Female	Female	Female
Age	16	18	14	15	15	18	17	15	19
No.	10	11	12	13	14	15	16	17	18

	Do you think you can learn to speak quietly for the whole of Sky Feast?	Yes	Yes, I can	Yes	Yes	Yes	Yes, Im well spoken	Yes	Yes	
	What did you gain from the swim time?	I learned how to swim and also had flu	Heat fro the sun was less	Healthy living	Being free	I shouldn' t rush	Nothing	I'm now able to swim	I know how to swim	Making new friends and learning how to swim
	What did you gain from the yoga sets you did?	I have learned how to forgive m self and control my anger issues	To be positive all the time	No	I gained self esteem	To be calm and believe in myself	More wisdom	Peace of mind	To relax and mind my business	Self love
	Do You have a mantor?	No	No	My dad	No	No	No	My sister	Bongi	
	Has your attitude to your self changed?	<i>I am able to forgive myself. I don' t blame my self for what my parents did</i>	<i>I have been poositve</i>	<i>By respecting myself</i>	Yes	<i>Yes,I'm now nice to my self</i>	<i>Yes, I don' t see things like before</i>	Yes	No	<i>Yes, know im proud of me self</i>
	Has your attitude to school work changed?	No, Child anger issues	When im tired I madtate to relax my mind	I know have less stress	Yes	Yes, I feel very opened	Yes	Yes	Yes I am now concerntrati ng	Has changed to better
No.	10	11	12	13	14	15	16	17	18	

	Do you have a message for your principal?	Thank you for giving us the opportunity to show that we can be the best. Thanks a lot	No	Thank you for the opportunity	Thank You for the opportunity	I appreciate you	Thank you for the opportunity	No	No	Thank you so much for being my teacher, I have learned a lot
	Do you have a message for your yoga teacher?	Thank you for pulling me from the dark and bringing me to the light	Yes	I love you all	Thank you I love you	Yes, mam	Thank you for being in our lives	Thank you for introducing us to yoga		
	How can Yoga4Alex help you become the best version of yourself?	To think positive and love myself and love other people	Meditation is very helpful because I have a lot of issues	I am now conscious	By teaching me new things every session	To give extra lessons on saturday	Explain yoga more to those who don't understand the practice	To be calm at all the times	To help me to be relieved	
	Do you plan to	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	What do you understand by a Yogic way of living?	Keep your body and mind strong by eating healthy food	Being flexy and focused all the time	By helping me be more concious	Healthy living	To be healthy to live for others	Live healthy	Stay healthy	To be healthy	Managing how you eat and relaxing
No.	10	11	12	13	14	15	16	17	18	

Has your family's attitude changed since Sky Fest?	I have been a lot calmer	Yes, I am a changed person	Yes, because I managed to change my time management skills	Yes, We don't fight anymore	Yes, I respect them and love them more	No	Yes, now we communicate more	Yes	Yes, we are now close
Describe your relationship with your family who takes care of you		We are very close	No, because there's lack of respect within each other and no respect for other people's properties	Happy and cheerful family	Calm and collected	Happy	Good	Very good	My mother is very loving
Did you make new friends?	Yes	Yes	Positive, loving and kind	Yes	Yes	Yes	Yes	Yes	Yes
Do you feel the effect of Sky Fest?	Yes	Yes, I'm calm	No, the environment is different from the Sky Fest one	Yes	Yes, the meditations	Yes	Yes	Yes	Yes
Did Something shift within you?	Yes, I found inner peace and true version of myself	Yes, Acknowledgment of self	Yes, my spiritual consciousness	Yes, my heart is at ease	Yes	Yes, my mind set	No	Yes, I learned how to love	No
Did you attend Sky Fest?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
School	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High
Grade	12	11	12	12	11	11	12	12	12
Gender	Female	Female	Female	Female	Female	Female	Female	Female	Female
Age	17	16	17	17	18	18	17	17	18
No.	19	20	21	22	23	24	25	26	27

	Do you think you can learn quietly for the whole of Sky Feast?	Yes	I can try	I understand that you get to connect with your body, mind and spirit through meditation. And be able to control your breathing	Yes	Relax and cool myself down	Heat from the sun was less	Nothing	To communicate with strangers	No	Yes	I met new people and it was very easy to make a conversation with
	What did you gain from the swim time?	Nothing	New swimming skills	Yes	Yes	Relax and cool myself down	Heat from the sun was less	Nothing	To communicate with strangers	I had time to think of my life	Yes	I met new people and it was very easy to make a conversation with
	What did you gain from the yoga sets you did?	I have received healing, I got to connect with my inner intuition	Acknowledgment of self	I had time to focus on what was happening	Be confident enough to share my secrets	Be confident enough to share my secrets	To be positive all the time	More wisdom	To save myself	I made new friends	To focus on my well-being and my surrounding	
	Do You have a mentor?	No	Bongi	No	Phineous	Phineous	No	No	Yes, I consider my feelings first before considering other	No	Yes, I know other people's feelings	
	Has your attitude to your self changed?	Yes	<i>I have accepted myself the way I am</i>	<i>Inner silence and forgiving</i>	<i>Yes, I don't rush to make decisions</i>	<i>Yes, I don't rush to make decisions</i>	<i>Im now positive</i>	<i>Yes, I don't see things like before</i>		<i>Yes, I know respect everyone</i>		
	Has your attitude to school work changed?	I am more comfortable with myself and I have been emotionally calm	Yes	Yes, I now get time to listen to myself and do a self introspection on what decision or plan I want to do	Yes, I give my self more time	Yes, I give my self more time	Yes, my mind is tired I meditate to get power	Yes	Yes, I know how to study without being distracted	Yes	Yes, I know have more time to study	
No.		19	20	21	22	23	24	25	26	27		

Do you have a message for your principal?	We are grateful to you for allowing us to attend the Sky Fest. We will make you proud this year 100% pass rate.	No	Thank you for the opportunity. I have now experienced Sky Fest and it was a very good feeling being part of the experience	Thank you very much for the classes during the whole year	No	Thank you for allowing yoga in our school now we know more about yoga	Thank you for allowing us to attend yoga	Thank you for allowing me to go to Sky Fest	Thank you for the opportunity, we met new people and I gain a lot from the diversity work-shop
Do you have a message for your yoga teacher?	Bongi, You are doing a great job. Thank you	I love you	Thank you for giving me the beautiful lessons that help me with keeping calm and relaxed. I no longer have anger issues		The meditation are helpful because we have issues	Thank you for being in our lives	Continue to be greater	Thank you for teaching me yoga	Stay focused and never give up, you inspire a lot of us
How can Yoga4Alex help you become the best version of yourself?	I am now a changed person, Im not easily irritated and I don't easily get grumpy	Implimenting the spirit of peace within me	Help me to manage stress and anxiety and keep me calm. Bring my mental and physical decline together.	By always informing me about the yoga classes that take place in Alex		Teach those that don't understand yoga more	By providing more yoga classes	Boost my confidence so that I can be a better person	Have private sessions
Do you plan to carry on doing yoga after school next year?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
What do you understand by a Yogic way of living?	I understand that it is a simple, ordinary way of living	Peace is key	Yes	We should always have peace within our self	Being flexy and focused all the time	Live healthy	Meditate more	Respect people's feelings	Healthy living
No.	19	20	21	22	23	24	25	26	27

Has your family's attitude changed since Sky Fest?	No	No, I am always happy at school	No, still the same	Yes, a lot	Yes, Before I couldn't share what I was feeling but now I'm able	No, I always respect	Yes, I now have a good relationship with them	No, I don't want to be negative so I always remember to respect them	Yes, self control
Describe your relationship with your family who takes care of you	Good	Yes, I am a positive person	It's a fun relationship	Yes	I'm now open with them	They care for me and they always show me ways of how to conduct myself	Good	They are good to me and they always encourage me	Good
Did you make new friends?	Yes	Its amazing	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Do you feel the effect of Sky Fest?	Yes	Yes	Yes, I feel relieved	Yes, I was chilled	Yes, I feel more alive	Yes	Yes, I do things quietly	Yes	No
Did Something shift within you?	No	Yes	Yes, perspective	Yes, I felt like I was reborn	Yes, I felt like I was reborn	No	Yes, my emotions	No	No
Did you enjoy Sky Fest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
School	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High	Alex High
Grade	12	10	10	9	10	11	11	11	11
Gender	Female	Male	Male	Male	Male	Female	Female	Female	Female
Age	18	18	17	16	18	16	17	16	18
No.	28	29	30	31	32	33	34	35	36

	Do you think you can learn to speak quietly for the whole of Sky Fest?	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes
	What did you gain from the swim time?	I learned how to swim		Fun and how to float	Happiness	Safety in swimming	Be helpful and always help others		Happiness and fun	Skills given by different people
	What did you gain from the yoga sets you did?			Muscles and awerness	Peace	Inner peace	I communicate with different people and participated in different activities and I enjoyed a	Yes, my body is relaxed	I had problems and they are all gone I'm free now	Communication is key
	Do You have a mantor'?				Bongi	My father	No		No, I cant change my attitude to please others	No
	Has your attitude to your self changed?	Yes		Yes, I am quiet and humble	Yes, I'm chilled	Yes, I can see the change	Yes, I'm now relaxed and calm andi took an advice from the Sky	Yes, less insensetive		Yes, I know how to control my emotions
	Has your attitude to school work changed?	Yes	Yes, I know my self and I do what I want	Yes, I am able to study	I am greatful	Yes, Im now focused with my school work	Yes, I was always forward and had anger issues	Yes, I can now focus	No, most people are used to my attitude so I cant change	Yes, good communication skills
No.		28	29	30	31	32	33	34	35	36

Do you have a message for your principal?		Thank You for allowing yoga at our school	Thank you for bringing Yoga at Alex high	No	Thank you for the opportunity. Thank you for introducing me to yoga	Thank you for the opportunity we really appreciate you	Thanks for allowing us to take part	Thank you for allowing yoga teachers in our school	I would like to express love and gratitude to my lovely principal who give us wonderful opportunities
Do you have a message for your yoga teacher?	Thank you for Being a great teacher		Thank you for Being there for me		Thank you for teaching us Yoga and thank you for this opportunity	we really appreciate yoga lessons	You are doing a good job well done	Thank you for everything I really appreciate what you have done for me	Thank you for spending time with me teaching me and loving me
How can Yoga4Alex help you become the best version of yourself?			How to be calm and respect myself		Help me when Im feeling down or sad	By helping us with meditations	By helping me not to gudge	Release a lot of pain and help me focus and concentrate on my studies	Can help me be strong enough to face challenges
Do you plan to carry on doing yoga after school next year?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
What do you understand by a Yogic way of living?	Healthy lifestyle	Give positive energy	They are always kind and loving	Loving your life	Healthy living	Healthy and always fit	Doing things quietly	People who help people with problems	Healthy lifestyle and happiness
No.	28	29	30	31	32	33	34	35	36

Has your family's attitude changed since Sky Fest?	Yes, my behaviour	Yes, I have a better understanding	Yes, I understand better	No, I've never had bad attitude	Yes, I'm now silent and happy with my self	Yes, my body is active	No, I don't have bad attitude	Yes, I now listen	Yes, I was noughly
Describe your relationship with your family who takes care of you	They love me	It is good but it can get better	Not that close	Its really good	We were happy and we enjoyed our selves	Good	We are happy	We are having meaningful discussions	Good
Did you make new friends?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Do you feel the effect of Sky Fest?	Yes	Yes, believing in myself	Yes, less talk more action	Yes, now I can easily calm down	Yes, I'm always happy	Yes	Yes, to be calm	Yes, I do yoga daily	Yes, When I'm alone I do yoga
Did Something shift within you?	Yes, my attitude	Yes, I feily love and happiness	Yes, my mind set	Yes, the anger I had for people	Yes, my emotions	Yes, confidence	Yes, my behaviour	Yes, tension within me	No
Did you enjoy Sky Fest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
School	Alex High	Alex High	Alex High	Alex High	Kwa-Bhekilanga	Kwa-Bhekilanga	Kwa-Bhekilanga	Kwa-Bhekilanga	Kwa-Bhekilanga
Grade	10	11	11	11	8	8	8	8	8
Gender	Female	Female	Female	Female	Female	Male	Female	Female	Female
Age	16	17	17	16	13	14	15	14	13
No.	37	38	39	40	41	42	43	44	45

No.	37	38	39	40	41	42	43	44	45
Has your attitude to school work changed?	Yes, Im now focused with my school work	Yes, I stopped giving up	Yes, concentration	No, They are still annoyed	Yes,like being chilled on my own	Yes, I'm still the same	Yes, Im improving	Yes, Im focused	Yes, I wasn't writing
Do you think you can learn quietly for the whole of Sky Fest?	No	No	I did	Maybe	Yes	No	Yes	Yes	Yes
What did you gain from the swim time?	Nothing		I had fun because I love water	Had fun	I was cool and refreshed	My body was cooled	I learned how to swim	Nothing changed	Learned how to swim
What did you gain from the yoga sets you did?	Trust and confidence	Yes, I understand that Im human and mistakes are bound to happen	More peace and confidence	Good communication with myself	I gained happiness	Stretching	new friends	Self motivation	
Do You have a mantor'?	Bongi		No	No	Thapelo	Messi	My parents	Nollin	My mother
Has your attitude to your self changed?	Yes I don't have bad attitude		Yes, Confidence	Yes, I can stay true to myself	Yes, I was always stressful	Yes	Yes, yoga is changing me for the better	Yes, I am relaxed and I'm myself	Yes, I wasn't taking care of myself

	Do you have a message for your principal?	No	Involve us in productive activities that help with our school work	No	Please support yoga	Thank you very much for everything	Thank you teacher	No	Thank you for allowing us to go	Thank you
	Do you have a message for your yoga teacher?	Thank you , keep up the good work	Continue changing lives	Thank you for giving us the experience	Thank you for introducing me to yoga	Thank yo for your teaching now I'm flexible and I have peace	Thank you teacher	Teach us more about yoga	Please do this daily	Thank you
	How can Yoga4Alex help you become the best version of yourself?	By always staying calm and focused	I want to be a yogi	Helping me understand how different people think	I have a challenge in communicating on so a workshop based on confidence	Thank you for taking the responsibility of teaching us about being our selves	Stretching my bones	By teaching yoga more so I can be the bestversion of myself	Help me believe in my self	Helping with the lessons when I'm stressed
	Do you plan to carry on doing yoga after school next year?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	What do you understand by a Yogic way of living?	Healthy lifestyle	People who live healthy	Healthy living	Doing yoga and always eating healthy		Eating healthy food	Loving each other	They are humble	People who live a healthy life
No.		37	38	39	40	41	42	43	44	45

	Has your family's attitude changed since Sky Fest?	No, nothing changed	No, I'm still the same	Yes, I have learned to be around different people and still be happy	Yes, we were well looked after	Yes, I was always moody	No, I've always respected	Yes	No, I'm still the same	No, I am happy
	Describe your relationship with your family who takes care of you	Good	Good	Loving and happy	Hard	Good	We are fine	Amazing	They take good care of me	Hard
	Did you make new friends?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Do you feel the effect of Sky Fest?	Yes, I enjoyed	Yes, the chemistry	Yes, I felt nature	Yes, I'm happy	Yes	Yes	Yes, I was in pain after yoga	Yes	Yes, I miss the place
	Did something shift within you?	No	Yes, my inner ability	Yes, joy	Yes, my behaviour	Yes, stress free	No	Yes, my heart	Yes, my attitude	Yes, my behaviour
	Did you enjoy Sky Fest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	School	Kwa-Bhekilanga	Kwa-Bhekilanga	Kwa-Bhekilanga	Kwa-Bhekilanga	Kwa-Bhekilanga	Kwa-Bhekilanga	Kwa-Bhekilanga	Kwa-Bhekilanga	Kwa-Bhekilanga
	Grade	8	8	8	8	8	8	8	8	8
	Gender	Female	Female	Female	Male	Female	Female	Male	Female	Female
	Age	15	14	14	14	14	13	13	13	14
	No.	46	47	48	49	50	51	52	53	54

	Do you think you can learn to speak quietly for the whole of Sky Fest?	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
	What did you gain from the swim time?	Nothing	Different styles of swimming	Learned how to swim	enjoyed	Swinging with my back	Learned how to swim	funtime	How to swim				
	What did you gain from the yoga sets you did?	Energy	I now know how to connect with my inner self	Knowledge	Relaxing of mind	Relaxing	How to relax myself	Control of my body	To concentrate			Fun	
	Do You have a mantor?	Marve's mother	My mother	Clara and Bathabile Mokati	My father	My mother	Mother	No	My mother			My mother	
	Has your attitude to your self changed?	No	<i>I now behave</i>	No	No	Yes, self-esteem	<i>No, I'm still myself</i>	<i>Yes, I know myself better</i>	<i>Yes, I can control myself and be loyal</i>			<i>I always think positive</i>	
	Has your attitude to school work changed?	No, I was always focused	Yes, I now have a better way of understanding and communicating	Yes, there is a good side of me	No	Yes, I focus more	No, I can stay focused	Yes	Yes, I now communicate well			No, my marks are still low	
No.		46	47	48	49	50	51	52	53			54	

	Do you have a message for your principal?	No	Thank you for allowing yoga we had an amazing experience	Thank you very much for allowing us to learn different things	Thank you for allowing the trip	Thank you	No	Thank you for allowing yoga at school	Thank you for allowing yoga	For allowing yoga in our school I'd like to say thank you
	Do you have a message for your yoga teacher?	Thank you	Thank you I had a great time	Thank you for the opportunity I have met new people	I enjoyed Sky Fest a lot	Keep up the good work and thank you	No	Thank you	Thank you for the good time	Thank you for taking us to the nice place
	How can Yoga4Alex help you become the best version of yourself?	By helping me with practicing and being a good person	Motivate me often	More yoga teachings	Don' t stop doing yoga	Teaching more yoga	More trips and more visits	A connection of my spirit and mind	By helping me be loyal and communicate better	To have a good life
	Do you plan to carry on doing yoga after school next year?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	What do you understand by a Yogic way of living?	They are healthy people	They eat healthy food and live a different life	Always exercise	Relaxing of mind	Yes	Eating healthy	Silence	They live a healthy life	They love animals and people
No.		46	47	48	49	50	51	52	53	54

Has your family's attitude changed since Sky Fest?	No, Its still the same	No	Yes, they love me	Yes, how to pay attention	No, I have done wrong things at Sky Fest	No, I didn't change	Yes, I'm always happy	No, I'm always good	Yes, Im always calm
Describe your relationship with your family who takes care of you	Hard	Good	They take care of me and they do everthing for me	My mom takes good care of me	Kind and honest	Good	Good	They are sweet	Caring
Did you make new friends?	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Do you feel the effect of Sky Fest?	Yes, I am calm and relaxed	No	No	Yes, I was relaxed	Yes, having fun	Yes, It was nice	Yes, It was fun	Yes, Sky Fest was peaceful	Yes, before I eat I know pray
Did Something shift within you?	Yes, my behaviour	No	My body	Yes, getting peace of mind	Yes, thinking fast and being relaxed		No	Yes, my stress	Yes, my soul
Did you enjoy Sky Fest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
School	Kwa-Bheklianga	Kwa-Bheklianga	Kwa-Bheklianga	Kwa-Bheklianga	Kwa-Bheklianga	Kwa-Bheklianga	Kwa-Bheklianga	Kwa-Bheklianga	Kwa-Bheklianga
Grade	8	8	8	8	8	8	8	8	8
Gender	Female	Female	Female	Female	Male	Male	Female	Female	Male
Age	15	14	14	14	14	14	13	14	13
No.	55	56	57	58	59	60	61	62	63

	Do you think you can learn quietly for the whole of Sky Fest?	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	What did you gain from the swim time?	Enjoyed	Learned how to swim	I enjoyed and it was fun	Be friendly and helpful	Made new friends and we were happy	Learned swimming	Nothing	I learned how to swim	Had fun and was relaxed	
	What did you gain from the yoga sets you did?	Being able to relax my body	I made friends	I gain experience	How to control my anger	Always be happy with people		Peace and love	I now have a peaceful soul and a lovely mind	Relaxing and being aware	
	Do You have a mantor?	My mother	Mlondo	No		Nokulunga	My father	Nokulunga	Thapelo	<i>Yes, I now embrace myself more than ever</i>	
	Has your attitude to your self changed?	<i>Yes, I know how to shake my body</i>	<i>I treat myself very good</i>	<i>No, I have a good attitude</i>	<i>I feel different</i>	<i>Yes, listen with understanding</i>	<i>No, I didn't change</i>	<i>Yes, I'm still normal</i>	<i>Yes, now I know the difference between peace of mind and flexibility</i>		
	Has your attitude to school work changed?	I do breathing excersises before I write my work	Yes, people around me always tell me to take care of my studies	No, I have been focused	Yes, high pass marks	Yes, my marks are going up	Yes, I now write my home works	Yes, I'm always happy	Yes, I was having a hard time	Yes, I'm focused and calm	
No.		55	56	57	58	59	60	61	62	63	

	Do you have a message for your principal?	Thank you for yoga at our school	Thank you	Thank you for inviting me	Thank you for allowing me to go to Sky Fest	Thank you very much for allowing yoga4alex join our school	Thank you for allowing our yoga teachers to take us to Sky Fest	Thank you for allowing this tour	Thank you for allowing yoga4alex join our school	
	Do you have a message for your yoga teacher?	Thank you	Thank you for the chance of experiancing Sky Fest	Thank you for inviting me	Thank you for everything	Thank you for all the help especially with reading	Thank you for talkinga care of us	Thank you for Sky Fest and what you did for me	Thank you for the care you always show to us	
	How can Yoga4Alex help you become the best version of yourself?	Teach me how to live healthy	When I have something bothering me I will do yoga	Please don' t change	Help me continue being a good person	Meet different people it is always a good thing	They inspire me to grow up and help other kids	Help me to calm myself down and enjoy the peace and quiet	Please help me with my school work and my life	By teaching me more yoga sets
	Do you plan to carry on doing yoga after school next year?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	What do you understand by a Yogic way of living?	They live a healthy life	Keep their bodies healthy	They are living a healthy life	Healthy living	Healthy living	Healthy living	Peace	They have peaceful souls and minds	Be calm
No.		55	56	57	58	59	60	61	62	63

	Has your family's attitude changed since Sky Fest?	Yes	Yes, I was not kind	No	Yes, I'm kind and caring	Yes, I know respect	Yes, I am respectful	No	Yes, I'm kind	Yes, I learned how to respect elders
	Describe your relationship with your family who takes care of you	Good	It is good	Its great	Good	Good	Good	Good	Good	Good
	Did you make new friends?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Do you feel the effect of Sky Fest?	Yes	Yes, healthy living	Yes	Yes	Yes	Yes	No	Yes	Yes, I'm always positive
	Did something shift within you?	No	Yes, Gong meditation healed	Yes, I understand myself and my body	Yes, I learned how to meditate	Yes, to meditate better	Yes, better meditation time	Yes	No	Yes, I felt calm
	Did you enjoy Sky Fest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	School	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High
	Grade	8	8	8	8	8	8	8	8	8
	Gender	Female	Female	Male	Male	Female	Female	Female	Male	Male
	Age	15	13	14	14	13	13	14	16	14
	No.	64	65	66	67	68	69	70	71	72

	Do you think you can learn quietly for the whole of Sky Fest?	NO	No	No	No	Yes	Yes	No	Yes	Yes
	What did you gain from the swim time?	Learned how to swim	I was relaxed	To be a great swimmer	Enjoyed and had fun	I enjoyed	It was fun and Dr Marianne taught me how to swim	I learned a lot of tricks	Nothing	Fun and learn how to swim
	What did you gain from the yoga sets you did?		Im now a peaceful girl	I respect people	Peace of mind	Relax myself	I was relaxed	I love yoga a lot	Meeting new people	Relaxations
	Do You have a mentor?	Sibusiso	My mother	My mother	My mom	No	My moteltr	Fulu	My father	My brother
	Has your attitude to your self changed?	<i>Yes, I understand myself</i>	<i>Yes, by concentrating</i>	<i>No, I have anger</i>	<i>Yes, I understand myself</i>	<i>No, Im always aware of myself</i>	<i>Yes</i>	<i>Yes, Im good to myself</i>	<i>Yes, I understand myself</i>	<i>Yes, I now understand myself better</i>
	Has your attitude to school work changed?	Yes, I know complete my work on time	Yes, Im peaceful	No, I was always nice and great	Yes, I know complete my homeworks	Yes, I know complete my home works	Yes, I complete my work	No it always been good	Yes, I now complete that work that I am given	Yes, now Im completing my home works
No.		64	65	66	67	68	69	70	71	72

	Has your family's attitude changed since Sky Fest?	Yes, I Have changed my mind	Yes, I don't have anger	Yes, I was feeling sorry for myself	No, I always have been kind	No, They don't understand me	Yes, more meditations	Yes, Meditation	Yes, now I read my books	Yes	No
	Describe your relationship with your family who takes care of you	We are a very happy family	Happy	We are better than before	I have a good relationship with my parents	We are not close	We not close	Good	We are very close to each other	Good	We are close and we discuss our problems
	Did you make new friends?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Do you feel the effect of Sky Fest?	Yes, my body was refreshed	Yes, it was fun	Yes	Yes	Yes	Yes, my attitude has changed	Yes, My attitude	Yes, I was able to do yoga better	Yes	Yes, Gong and Yoga songs
	Did Something shift within you?	Yes, they made my mind refresh	Yes, meditation	No	Yes, I learned how to wake up early	Yes, my attitude towards life	Yes, my mindset	Yes, Mindset	No	Yes	Yes
	Did you enjoy Sky Fest	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
	School	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High	Realogile High
	Grade	8	8	8	8	12	12	12	8	8	12
	Gender	Female	Male	Female	Male	Female	Female	Female	Male	Male	Female
	Age	14	13	14	14	19	17	19	15	15	17
	No.	73	74	75	76	77	78	79	80	81	82

	Do you think you can learn to speak quietly for the whole of Sky Fest?	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	
	What did you gain from the swim time?	Fun	I learned how to swim	Swimming lessons	I met new people and made a lot of friends	I made new friends and got a chance to cool down	Be kind and help others	Teaching another person how to read	To swim	I learned how to swim and communicate with people	
	What did you gain from the yoga sets you did?	Peace of mind	TO be focused	Mind and body relaxation	Calm	I understand myself better	I learned more about yoga	To stay positive and control my emotions	Knowledge	To make friends and focus on myself	
	Do You have a mentor?	My mother	Sibusiso	My mother	My uncle	No	No	No	No	No	
	Has your attitude to your self changed?	<i>Yes, I learned a lot from Sky Fest</i>	<i>Yes, I love yoga a lot more than before</i>	<i>Yes, I am compite</i>	<i>Yes, I see growth</i>	<i>Yes, I understand myself better</i>	<i>Yes, Im more positive</i>	<i>Yes, I stay positive</i>	<i>Yes, I don't play around anymore I take my work seriously</i>	<i>Yes</i>	<i>Yes, the way I communicate with ppeople</i>
	Has your attitude to school work changed?	Yes, I write my hoemworks at home and I don't rush in the morning	Yes, I am complant	Yes, I can focus better	Yes, I got help with school work	Yes, the meditations helped a lot	Yes, dedication	Yes	Yes, I now do my school work on time	Yes	No
No.		73	74	75	76	77	78	79	80	81	82

	Do you have a message for your principal?	Sat Nam	We love you and thank you for allowing us to go to Sky Fest	Thank You	Thank you for allowing us to go to the Festival	No	Thank you please allow more yoga lessons	No	Thank you for giving me the opportunity to go to Sky Fest	No	Thank you for letting us do yoga
	Do you have a message for your yoga teacher?	Thank you for teaching and putting more effort	Yes, thank you for a beautiful Sky Fest it was fun	Sat Nam	They helped us when we needed then to	Please continue with helping others	Help me with teaching more yoga lessons	Thank you for helping me to be the person I'm turning to be	Thank you	No	Thank yo for what you have done for us and the attention you give us
	How can Yoga4Alex help you become the best version of yourself?	Teach me yoga	Teaching me yoga a lot more	Help me meditate and relax my body	School work	Help me with focusing when meditating	Its important to ot know and trust yourself	By teaching me how to control my emotions and be myself	Continue doing afterschool program	Help me forgive	No sure
	Do you plan to carry on doing yoga after school next year?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	What do you understand by a Yogic way of living?	Eating healthy	They are vegetarian	eating healthy and meditating	Vegetarians	Connecting with spiritual self	Healthy lifestyle	Positive attitude and healthy lifestyle	They don't eat meat they dress differently	To relax	Meditation
No.	73	74	75	76	77	78	79	80	81	82	